



SITE: VCC-ATLANTA
BREAK: 2.4 v.1
OTHER: _____

Craig Zeller
USEPA Region 4
Atlanta Federal Center
61 Forsyth Street, S.W.
Atlanta, Georgia 30303-8960

ARCADIS
11000 Regency Parkway
West Tower
Suite 205
Cary
North Carolina 27518-8518
Tel 919.469.1952
Fax 919.469.5676
www.arcadis-us.com

Subject:
Site Delineation Report and Removal Action Work Plan
VCC-Atlanta, DeKalb County, Georgia

ENVIRONMENT

Dear Craig:

Date:
February 11, 2009

On behalf of ExxonMobil Environmental Services Company (EMES), enclosed for your review and comment are three copies of the document Site Delineation Report and Removal Action Work Plan, Former Virginia-Carolina Chemical Corporation Site, Atlanta, DeKalb County, Georgia (ARCADIS, 2009).

Contact:
Corrie Chwalek

Phone:
919.415.2286

Please contact Mr. Bruce Frink of EMES at 813.991.7413 if you have any questions regarding the enclosed document.

Email:
Corrie.Chwalek
@arcadis-us.com

Sincerely,

Our ref:
B0085725

ARCADIS

Corinda Chwalek, P.E.
Senior Project Engineer 2

Enclosures: 3

Copies:
A. Cleary, EPD
B. Frink, ExxonMobil
G. Germann, ARCADIS

Imagine the result



**ExxonMobil Environmental Services
Company**

**Site Delineation Report and
Removal Action Work Plan**

**Former Virginia-Carolina Chemical
Corporation Site**

Atlanta, DeKalb County, Georgia

February 2009



Corinda Chwalek, P.E.
Senior Project Engineer 2



Geoffrey Germann, P.E.
Vice President/Principal Engineer

**Site Delineation Report and
Removal Action Work Plan**

Former Virginia-Carolina
Corporation Site, Atlanta, DeKalb
County, GA

Prepared for:
ExxonMobil Environmental Services
Company

Prepared by:
ARCADIS
11000 Regency Parkway
West Tower
Suite 205
Cary
North Carolina 27518-8518
Tel 919.469.1952
Fax 919.469.5676

Our Ref.:
B0085725

Date:
February 2009



1. Introduction	1
1.1 Introduction	1
1.2 Project Objectives	1
1.3 Site Description and Background	1
1.3.1 Former Facility Description	1
1.3.2 Site Location	2
1.3.3 Land Cover and Vegetation	2
1.3.4 Regional Geology and Hydrogeology	3
1.4 Summary of the Previous Investigation	4
1.5 Report Organization	4
2. Data Collection Activities	6
2.1 Introduction	6
2.2 Delineation Strategy	6
2.3 Pre-Delineation Activities	6
2.4 Soil Sampling and Analysis	7
2.5 Groundwater Sampling and Analysis	8
2.5.1 Monitoring Well Installation	8
2.5.2 Groundwater Elevation Measurement	8
2.5.3 Groundwater Sample Collection and Analyses	8
2.6 Surface Water Sampling and Analysis	9
2.7 Sediment Sampling and Analysis	9
2.8 Investigation-Derived Waste Sampling	9
2.9 Surveying	9
2.10 Data Validation	9
3. Summary of Results	11
3.1 Introduction	11

3.2	Development of Media-Specific Action Levels	11
3.2.1	Soil Standards	11
3.2.2	Groundwater Standards	11
3.2.3	Sediment Standards	12
3.2.4	Surface Water Standards	12
3.3	Soil Sample Results	12
3.4	Groundwater Occurrence and Movement	13
3.5	Groundwater Sample Results	13
3.6	Surface Water Sample Results	13
3.7	Sediment Sample Results	14
3.8	Waste Characterization Results	14
3.9	Investigation-Derived Waste Sampling and Disposal	14
4.	Removal Action Strategy	16
4.1	Introduction	16
4.2	Removal Action	16
4.2.1	Installation of an Asphalt Cap	16
4.2.2	Soil Removal	17
4.2.3	Groundwater	17
4.2.4	Deed Restrictions	18
5.	Removal Action Work Plan	19
5.1	Introduction	19
5.1.1	Work Plan Objectives	19
5.2	Project Organization	20
5.2.1	Regulators/Agencies	20
5.2.2	Responsible Party	20
5.2.3	Engineer	20
5.2.4	Removal Action Contractor	21

5.2.5	Waste Disposal Facility	22
5.2.6	Analytical Laboratory	22
5.3	Technical Approach and Scope of Work	22
5.3.1	Asphalt Cap Design	23
5.3.2	Securing Access Agreements for Construction	23
5.3.3	Mobilization	23
5.3.4	Preparation of the Site for Removal Activities	23
5.3.4.1	Installation of Erosion and Sediment Control Measures	24
5.3.4.2	Subsurface Utility Markout	24
5.3.5	Clearing and Grubbing	24
5.3.6	Installation of a Cover System	25
5.3.6.1	Proposed Cap Design and Installation	25
5.3.6.2	Asphalt Cap Maintenance	26
5.3.7	Excavation of Impacted Soil	26
5.3.8	Confirmation Sampling Plan	28
5.3.9	Transport to Disposal Facility	29
5.3.10	Submittals	29
5.3.10.1	Site Operations Plan	30
5.3.10.2	Health and Safety Plan	34
5.3.11	Site Restoration	36
5.4	Reporting	36
5.4.1	Weekly Reports	36
5.4.2	Final Report	37
5.5	Institutional Controls	38
5.6	Schedule	38
6.	References	39

ARCADIS

Tables

2-1	Summary of Sample Analytical Program
2-2	Groundwater Monitoring Well Specifications
2-3	Groundwater Elevations
2-4	Surface Water Elevations
3-1	Summary of Soil Sample Analytical Results from Residential/ Recreational Properties
3-2	Summary of Soil Sample Analytical Results from Commercial Properties
3-3	Summary of Groundwater Sample Analytical Results
3-4	Summary of Surface Water Sample Analytical Results
3-5	Summary of Sediment Sample Analytical Results
3-6	Summary of Waste Characterization Sample Analytical Results
3-7	Summary of Investigation-Derived Waste Sample Analytical Results
3-8	Summary of Field Quality Control Sampling Results
4-1	Summary of Removal Action

Figures

1-1	Site Location Map
1-2	Base Map of Site Showing Former VCC Property Boundaries with Current Tax Parcel Data
1-3	Site Map Showing Historical and Current Site Features
2-1	Locations of Soil Samples
2-2	Groundwater, Surface Water, and Sediment Sample Locations
3-1	Locations of Soil Samples Exceeding Screening Levels
3-2	Shallow Groundwater Potentiometric Surface Map – June 27, 2008
3-3	Groundwater Sample Analytical Results
3-4	Surface Water and Sediment Sample Analytical Results
4-1	Summary of Removal Action
5-1	Typical Asphalt Cover Cross-Section



Appendices

- A Visual Soil Classifications
- B Monitoring Well Construction Logs
- C Waste Manifests



List of Acronyms and Abbreviations

amsl	above mean sea level
ARCADIS	ARCADIS U.S., Inc.
bgs	below ground surface
COC	contaminant of concern
DOT	Department of Transportation
E&SC	erosion and sediment control
EMES	ExxonMobil Environmental Services Company
HASP	Health and Safety Plan
IDW	investigation-derived waste
µg/L	micrograms per liter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MCL	Maximum Contaminant Limit
MSDS	Material Safety Data Sheet
OSC	On-Scene Coordinator
OSHA	Occupational Safety and Health Administration
PA/SI	Preliminary Assessment/Site Inspection
PCB	polychlorinated biphenyl
PPE	personal protective equipment
PRG	Preliminary Remediation Goals
QAPP	Quality Assurance Project Plan
QC	Quality Control
RAC	Removal Action Contractor
RAWP	Removal Action Work Plan
RCRA	Resource Conservation and Recovery Act
SVOCs	semi-volatile organic compounds
SSAL	site-specific action level
TAL	Target Analyte List
TCL	Target Compound List

ARCADIS

List of Acronyms and Abbreviations (Cont.)

TCLP	Toxicity Characteristic Leachate Procedure
TestAmerica	TestAmerica, Inc.
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VCC	Virginia-Carolina Chemical Corporation
VOCs	volatile organic compounds
XRF	x-ray fluorescence

1. Introduction

1.1 Introduction

This Site Delineation Report and Removal Action Work Plan has been prepared by ARCADIS on behalf of ExxonMobil Environmental Services Company (EMES) to present the results of the activities performed for site delineation and describes the removal action to address the arsenic- and lead- impacted media at the former Virginia-Carolina Chemical Corporation (VCC) phosphate/fertilizer plant located in Atlanta, DeKalb County, Georgia (the Site). Figure 1-1 identifies the Site location on the U.S. Geological Survey (USGS) 7.5-minute quadrangle for Northeast Atlanta, Georgia.

Unless otherwise specified in this report, the site delineation activities described herein were performed in accordance with the United States Environmental Protection Agency- (USEPA-) approved *Site Delineation Work Plan, Former Virginia-Carolina Chemical Corporation Site, Atlanta, DeKalb County, Georgia (Work Plan)* (ARCADIS, 2008).

1.2 Project Objectives

The objective of the site delineation activities was to evaluate and refine the magnitude and extent of arsenic and lead concentrations previously detected in soil and groundwater at the Site. These data, in conjunction with data obtained during the Preliminary Assessment/Site Inspection investigation conducted in 2006 (BBL, 2007), were used to develop an appropriate removal action strategy for the Site that is protective of both human health and the environment. This report summarizes the cumulative data collected and the proposed removal action strategy.

1.3 Site Description and Background

1.3.1 Former Facility Description

The former VCC plant in Atlanta, Georgia was established by Virginia-Carolina Chemical Company near the turn of the 20th Century through the acquisition of three facilities: the former Virginia-Carolina Chemical Company Fertilizer Works facility; the former Clifton Chemical and Phosphate Company plant facility; and the former Kennesaw Plant facility. Prior to acquisition by Virginia-Carolina Chemical Company, all three of these facilities produced sulfuric acid using the lead acid chamber process. However, following acquisition by Virginia-Carolina Chemical Company, it appears that

fertilizer manufacturing and acid production operations were eventually consolidated into the former VCC Fertilizer Works located in the northwestern portion of the Site (Figure 1-2). The Clifton Chemical and Phosphate Company facility was out of operation by 1892, and in ruins by 1899 before being acquired by VCC. The Kennesaw Guano Company operated a complete fertilizer plant with a lead acid chamber structure until at least 1899, but by 1911 the lead acid chamber structure was removed, and Virginia-Carolina Chemical Company was using the former mill and dumping pit for fertilizer storage.

Virginia-Carolina Chemical Company entered into bankruptcy in 1924. At the conclusion of federal reorganization proceedings in 1926, VCC of Richmond, Virginia emerged as a new company and acquired the former Virginia-Carolina Chemical Company phosphate fertilizer operations in Atlanta, DeKalb County, Georgia. VCC began selling its DeKalb County properties starting in 1938, and in 1961, VCC sold its remaining property to the City of Atlanta, which included the site of the VCC Fertilizer Works. In 1963, VCC merged into Socony Mobil Oil; the company name changed in 1966 to Mobil Oil Company and in 1998, Exxon Corporation merged with Mobil Oil Company to form Exxon Mobil Corporation, the successor to VCC.

Main historic facility structures included the main fertilizer building, acid chambers, storage buildings, burner house, coal pile, and reservoir. Historical site features are shown on Figure 1-3.

1.3.2 Site Location

The former VCC Site is located in Atlanta, DeKalb County, Georgia (Figure 1-1). The Site is currently bounded by the MARTA/CSX railroads and LaFrance Street (a.k.a. College Avenue, NE) to the north; Wade Avenue and Hardee Street to the south; Wesley Avenue and a small branch of Sugar Creek to the west; and the western boundary of the DeKalb County Land Lot 210B of District 15 (formerly Clay Street) to the east (Figure 1-2). Figure 1-2 also shows the current tax parcel property boundaries in the vicinity of the Site. The geographical location of the center of the Site is at approximately 33.7586° north latitude and 84.3325° west longitude.

1.3.3 Land Cover and Vegetation

The Site lies within the Piedmont physiographic province of Georgia, which is characterized by a gently rolling landscape that increases in intensity approaching the Valley and Ridge and Blue Ridge provinces to the north. Topographic relief in the

vicinity of the former VCC property is moderate, with ground surface elevations generally varying from 940 to 1,030 feet above mean sea level (amsl) (EDR, 2005).

The Site is currently occupied by a mix of residential, commercial, vacant, undeveloped, recreational, and other (i.e., roads) types of property. Residential properties include the LaFrance Street Loft Condominiums, Arizona Lofts, Edgewood Court Apartments, and residential properties along Wesley Avenue, NE (Figure 1-2). Commercial properties include the Atlanta Public Schools Service Center, the Lloyd Property, Consolidated Fuzz Property, and the Edwards Baking Company Property. Undeveloped/vacant property includes the Pacific & Southern Properties. Recreational properties include the Atlanta Youth Soccer Association Property and Gilliam Park.

Adjacent property usage includes commercial, industrial, recreational, residential, and vacant/undeveloped properties located on all sides of the Site. Figure 1-3 depicts the approximate locations of major structures, improvements, and other features now or formerly situated within and adjacent to the boundaries of the Site.

A branch of Sugar Creek, which forms the western boundary of the former VCC property, is the most prominent surface water body in the vicinity of the Site. This branch of Sugar Creek empties into Sugar Creek approximately 1.2 miles south of the Site. Sugar Creek empties into the South River that flows southeasterly into Jackson Lake reservoir, near Stewart, Georgia. The Site lies within the Ocmulgee River drainage Basin; the Ocmulgee River empties into the Atlanta Ocean near Darien, Georgia (southeastern Georgia).

1.3.4 Regional Geology and Hydrogeology

In the Piedmont province of Georgia, bedrock is typically overlain by a layer of regolith. Regolith varies in both thickness and composition and typically includes topsoil, alluvium, and/or saprolite depending on the topography and geologic history of the area. Saprolite, which is commonly a major component of regolith, is soil formed by the in situ chemical and physical weathering of igneous or metamorphic bedrock. Regolith is typically underlain by ancient crystalline bedrock, which is sometimes referred to as basement rock.

The Piedmont physiographic provinces of the southeastern United States are characterized by a two-part groundwater system, comprised of regolith and bedrock. The regolith is the primary storage reservoir for the underlying bedrock and has high porosity and low permeability. Precipitation is stored as groundwater in the

intergranular spaces of the regolith as it infiltrates through the subsurface. The water table typically exists with the regolith, and the direction of shallow groundwater flow generally mimics the slope of the land surface. Within the underlying crystalline bedrock, there are few primary pore spaces due to the intense heat and pressure under which the bedrock formed. Due to the lack of pore spaces, the primary porosity and permeability of unweathered and unfractured bedrock is very low. Groundwater storage and movement within bedrock is typically dominated by secondary features (i.e., bedrock fractures). Bedrock fractures are common in the Piedmont physiographic provinces and may serve as conduits for groundwater movement (adapted from LeGrand, 2004).

Based on a *Geologic Map of Georgia* (GA Geological Survey, 1976), the bedrock underlying Atlanta and DeKalb County consists of interlayered metamorphic rock (including amphibolites, gneiss, mica schist), which formed during the Pennsylvanian Age of geologic time (320 to 286 million years ago).

1.4 Summary of the Previous Investigation

Between September and November of 2006, a site investigation was performed by BBL (now known as ARCADIS) on behalf of EMES to evaluate the magnitude and extent of arsenic- and lead-impacted media. This investigation was completed in accordance with the USEPA-approved Preliminary Assessment/Site Investigation (PA/SI) Work Plan (BBL, 2005) and included collection of soil, sediment, groundwater, and surface water samples. Analytical results indicated the presence of elevated concentrations of arsenic and lead in soil and groundwater collected from the northern portion of the Site. The highest concentrations of arsenic and lead were detected in soil samples collected from the commercial area of the property owned by the Atlanta Public Schools in the vicinity of the former acid chambers. Arsenic and lead were also detected in samples collected from one of the three groundwater monitoring wells installed at concentrations just above USEPA's Maximum Contaminant Level (MCL) of 10 micrograms per liter ($\mu\text{g/L}$) for arsenic and 15 $\mu\text{g/L}$ for lead. Surface water and sediment samples collected from four locations at the Site did not contain elevated concentrations of arsenic or lead. The results of this initial investigation were described in the PA/SI Report (BBL, 2007).

1.5 Report Organization

The introduction provided in this section is followed in Section 2 by a description of the delineation activities performed to characterize the presence and extent of arsenic and

lead in site-media. Section 3 summarizes the data generated during these and previous delineation activities. Section 4 presents the proposed removal action strategy and Section 5 presents specific details of the proposed removal action. References cited in this report are included in Section 6.

This report also has three appendices. These appendices includes visual soil classifications, monitoring well construction logs, and copies of the waste manifests documenting the removal of investigation-derived waste (IDW).

2. Data Collection Activities

2.1 Introduction

Soil and groundwater samples were collected to evaluate and refine the presence and extent of arsenic and lead at the former VCC Site. Representatives of ARCADIS implemented and oversaw all field activities in support of the investigation, which took place between September and November 2006 and in June 2008. Unless otherwise specified in this report, all investigation activities were performed in accordance with the Work Plan.

2.2 Delineation Strategy

Between September and November 2006, ARCADIS, on behalf of EMES, collected soil, groundwater, sediment, and surface water samples from the Site. Analytical data were compared to USEPA screening levels considered to be protective of human health and the environment. Results indicate that soil and groundwater contained arsenic and lead at concentrations exceeding USEPA's screening levels. Based on these results, EMES performed additional sampling activities to delineate the extent of impacted soil and groundwater.

The additional delineation activities included the collection of soil and groundwater samples from the northern and north-central portions of the Site in the vicinity of the former fertilizer structures to refine the limits of areas that may also require a removal action. Three additional groundwater monitoring wells were also installed in June 2008 to support the data collection activities.

2.3 Pre-Delineation Activities

Prior to the start of sampling, EMES obtained written permission from each of the affected property owners to enter the properties and collect samples. Before beginning any subsurface activities, the locations of underground utilities were identified by the public utility locating service to minimize the possibility of disrupting services to the property and to protect the safety of the workers. To further confirm the absence of utilities, a private utility locating company, UP Spec Services, Inc. of Cleveland, Georgia, was contracted to clear all areas where subsurface work was to be performed.

2.4 Soil Sampling and Analysis

Between September and November 2006, on behalf of EMES, ARCADIS collected 162 soil samples from 60 soil boring locations. As described above, ARCADIS returned in June 2008 to complete the delineation discussed in the Work Plan and collected an additional 82 soil samples from 28 soil boring locations. In all, a total of 244 soil samples were collected from 88 soil borings advanced at the locations shown on Figure 2-1.

At each soil boring location, soil samples were collected using a properly decontaminated stainless steel hand auger. Samples were collected from 0 to 0.5 feet, 0.5 to 2 feet, and in 2-foot intervals thereafter to a maximum depth of 8 feet below ground surface (bgs) or until groundwater or refusal was encountered, whichever occurred first.

Soil samples were screened in the field for arsenic and lead using a portable X-ray fluorescence machine (XRF) and were submitted to, and analyzed by TestAmerica, Inc. of Nashville, Tennessee (TestAmerica) for arsenic and lead. A summary of the soil samples collected is presented in Table 2-1; physical descriptions of these soil samples are presented in Appendix A.

Toxicity Characteristic Leachate Procedure (TCLP) leaching analyses were performed on soil samples collected from seven locations where soil arsenic and/or lead concentrations exceeded the USEPA screening levels. These analyses determine appropriate disposal requirements for soil for evaluating potential soil removal alternatives. In general, TCLP analyses were performed using a composite of the soil samples collected from the ground surface to the maximum depth at which laboratory analyses indicated the presence of arsenic or lead at concentrations above USEPA screening levels. The specific samples selected for TCLP analyses were determined following receipt of the preliminary laboratory analytical data. These composite soil samples were analyzed for total arsenic and lead and TCLP metals. Locations of soil samples analyzed for TCLP are shown on Figure 2-1. A summary of the waste characterization soil samples collected is provided in Table 2-1.

2.5 Groundwater Sampling and Analysis

2.5.1 Monitoring Well Installation

Three groundwater monitoring wells (ATLMW-01 through ATLMW-03) were installed in 2006 to assess shallow groundwater quality and to evaluate the occurrence and flow of shallow groundwater at the Site. In 2008, three additional groundwater monitoring wells (ATL-MW-04 through ATL-MW-06) were installed to delineate the extent of arsenic and lead concentrations in groundwater and to obtain additional groundwater data downgradient of existing monitoring well ATL-MW-02.

Prior to construction, a soil boring was advanced at each of the proposed monitoring well locations and the soil was screened in the field using an XRF. Monitoring wells ATL-MW-01, -02, -03, and -04 were completed as single-cased monitoring wells while monitoring wells ATL-MW-05 and -06 were completed as double-cased wells due to the observation of potential magenta slag. All wells were screened across the water table and developed in accordance with the procedures specified in the Work Plan. The locations of the monitoring wells are shown on Figure 2-2. Groundwater monitoring well specifications are provided in Table 2-2 while construction details and well construction logs are presented in Appendix B.

2.5.2 Groundwater Elevation Measurement

Groundwater elevations were measured at the monitoring wells and existing surface water staff gauges to provide data for the development of a groundwater potentiometric surface map. Depth-to-water measurements were performed in accordance with the procedures specified in the Work Plan. Groundwater and surface water elevations are provided in Tables 2-3 and 2-4, respectively.

2.5.3 Groundwater Sample Collection and Analyses

Groundwater samples were collected in 2006 and 2008 using low-flow/low-stress sampling techniques in accordance with the procedures specified in the Work Plan. Groundwater samples were analyzed by TestAmerica for arsenic and lead. In addition, groundwater was measured in the field for pH, temperature, conductivity, dissolved oxygen, turbidity, and redox potential using a Horiba U-22 multi-parameter water quality meter with a flow-through cell. A summary of the groundwater sampling program is presented in Table 2-1.

2.6 Surface Water Sampling and Analysis

Four surface water samples were collected at the Site in September 2006 from the locations shown on Figure 2-2 to evaluate whether surface water drainage pathways are potential sources for the offsite migration of contaminants. Surface water samples were analyzed for arsenic and lead. A summary of the surface water sampling program is presented in Table 2-1.

2.7 Sediment Sampling and Analysis

Four sediment samples were collected at the Site in September 2006 at the locations shown on Figure 2-2. These samples were collected to evaluate whether surface water drainage pathways are potential sources for the offsite migration of contaminants. Samples were collected from 0 to 0.5 feet below sediment surface and analyzed for arsenic and lead. A summary of the sediment sampling program is presented in Table 2-1.

2.8 Investigation-Derived Waste Sampling

A total of 48 drums (13 containing liquid and 37 containing soil/debris/personal protective equipment [PPE]) of IDW were generated during the 2006 and 2008 sampling activities at the Site. Composite samples were collected to characterize the IDW. Drums containing solids were analyzed for TCLP metals and pH, while drums containing aqueous decontamination solutions were analyzed for target analyte list (TAL) metals and pH. Samples were collected in accordance with the procedures specified in the Work Plan. A summary of the IDW sampling program is provided in Table 2-1.

2.9 Surveying

Surveying was conducted by DLM Civil Engineering & Land Surveying of Kennesaw, Georgia. All soil borings and monitoring wells were surveyed for horizontal and/or vertical control. All survey data was referenced to the North American Horizontal Datum of 1983 and the North American Vertical Datum of 1988.

2.10 Data Validation

Laboratory analytical data were validated by ARCADIS in accordance with the procedures outlined in the Quality Assurance Project Plan (QAPP) contained in the

Work Plan. Data validation entails a review of the quality control (QC) data and the raw data to verify that the laboratory was operating within required limits, the analytical results are correctly transcribed from the instrument read outs, and which, if any, environmental samples are related to any deficient QC samples. The objective of the data validation is to identify any questionable or invalid laboratory measurements and to determine if the quality is sufficient to meet the data quality objectives.

3. Summary of Results

3.1 Introduction

This section of the report describes the results of the data collection activities described in Section 2.

3.2 Development of Media-Specific Action Levels

The acid chambers used in the fertilizer production process represent the greatest potential for adverse environmental impacts (USEPA, 1997). During periodic cleaning of the lead chambers, it is believed that washdown water containing acid and soluble lead was flushed onto the ground surface. Pyrite cinders that did not burn completely in the combustion chambers were frequently used as onsite fill material. This slag material has a reddish (magenta) appearance and has been found to contain elevated levels of inorganic constituents, primarily arsenic and lead.

Experience at the other former VCC Sites in USEPA Region 4 indicates that site-related constituents of concern (COCs) are arsenic and lead. At this Site, arsenic and lead are the COCs; therefore, the RAWP presented in Section 5 will address arsenic and lead.

3.2.1 Soil Standards

Soil sample locations were divided into two categories, residential/recreational and commercial properties, each having its own set of screening levels. The site-specific action levels (SSALs) for the residential properties are 27 milligrams per kilogram (mg/kg) for arsenic and 400 mg/kg for lead. The screening levels for the commercial properties were 27 mg/kg for arsenic and 800 mg/kg for lead. The screening level for arsenic of 27 mg/kg is a USEPA-determined value which is used as a remediation endpoint at similar former VCC fertilizer sites in USEPA Region 4. The screening level for lead of 400 mg/kg is based on the USEPA Region 9 Preliminary Remediation Goal (PRG) for sites with residential use, while the screening level for lead of 800 mg/kg is the USEPA Region 9 PRG for sites with industrial use.

3.2.2 Groundwater Standards

Groundwater standards are based on the USEPA's MCLs for drinking water. Similar to the soil standards described above, MCLs are considered to be applicable only for Site

COCs (arsenic and lead). The MCLs for arsenic and lead are 10 µg/L and 15 µg/L, respectively.

3.2.3 Sediment Standards

Standards selected for evaluating arsenic and lead concentrations in sediment are based on the USEPA standards for residential soil, as discussed above. Therefore, the SSALs for arsenic and lead in sediment are 27 mg/kg and 400 mg/kg, respectively.

3.2.4 Surface Water Standards

Surface water standards are based on MCLs in drinking water developed by the USEPA. The MCLs for arsenic and lead are 10 µg/L and 15 µg/L, respectively.

3.3 Soil Sample Results

During the combined 2006 and 2008 site investigation and delineation activities, a total of 244 soil samples from 88 soil borings were analyzed for arsenic and lead. Arsenic and/or lead were detected above the SSALs in two distinct areas at the Site (Figure 3-1). The largest contiguous area containing elevated concentrations of arsenic and/or lead is located in the north-central portion of the Site near the approximate location of the former fertilizer structures. The second area, located in the northeast corner of the Site, contains only one soil boring with arsenic and lead concentrations above the SSALs.

The maximum arsenic and lead concentrations of 1,260 mg/kg and 2,660 mg/kg, respectively, were collected from soil boring ATL-SB-020 located near the radio tower. Soil pH levels varied between 4.3 and 7.8 standard units. Soil boring locations with arsenic and/or lead concentrations greater than the screening levels are presented on Figure 3-1. Laboratory analytical data for samples collected from the residential/recreational and commercial properties are presented in Tables 3-1 and 3-2, respectively.

Additional soil sampling will be conducted along the western property boundary west of the branch of Sugar Creek to define the western limits of arsenic- and lead-impacted soils. Soil sampling will be conducted prior to initiating the removal action.

3.4 Groundwater Occurrence and Movement

Water level measurements were collected under static groundwater conditions on October 11, 2006, November 9, 2006, and June 27, 2008. Groundwater elevations observed in June 2008 varied from 967.30 feet bgs (ATL-MW-05) to 999.18 feet bgs (ATL-MW-03). A groundwater potentiometric surface map for the June 2008 gauging event is depicted on Figure 3-2. The depth to groundwater and groundwater elevations are presented in Table 2-3.

As shown on the shallow groundwater potentiometric surface map (Figure 3-2), groundwater generally flows from northeast to southwest towards the Branch of Sugar Creek. The horizontal component of the groundwater hydraulic gradient, calculated from the groundwater elevation contours, was an average of 0.023 foot/foot across the site.

3.5 Groundwater Sample Results

Groundwater samples were collected in October and November of 2006 from three groundwater monitoring wells (ATL-MW-01 through ATL-MW-03) and on June 27, 2008, from the six monitoring wells (ATL-MW-01 through ATL-MW-06) installed at the Site (Figure 3-3). Groundwater pH measured in 2008 was generally stable and varied across the Site from 4.47 to 6.65 standard units.

Arsenic and lead concentrations were compared to the USEPA MCLs for drinking water of 10 µg/L and 15 µg/L, respectively. Arsenic and lead were detected at concentrations above the MCLs in samples collected from MW-02 during the 2006 event; however, during the 2008 groundwater sampling event, arsenic and lead were either not detected or detected at concentrations below the MCLs in all six wells sampled. Groundwater analytical results and field parameter data are presented in Table 3-3 and shown on Figure 3-3.

3.6 Surface Water Sample Results

Surface water samples were collected from four locations on the Site on September 26, 2006 that included two locations in the branch of Sugar Creek and two locations in the unnamed creek that traverses the Site (Figure 3-4).

Arsenic and lead were not detected in three of the four surface water samples (ATL-SW-01, -03, and -04) collected from the Site. Arsenic and lead concentrations in ATL-

SW-02 were 8.5 µg/L and 4.3 µg/L, respectively, which are less than the SSALs. Surface water analytical results and field parameter data are presented in Table 3-4 and Figure 3-4.

3.7 Sediment Sample Results

During the 2006 site investigation activities, four sediment samples were collected at the Site at the locations shown on Figure 3-4. Samples were collected from 0 to 0.5 feet below sediment surface and analyzed for arsenic and lead. The maximum arsenic and lead concentrations detected in sediment were 10.4 mg/kg and 83.4 mg/kg in sample ATL-SD-02, respectively. None of the sediment samples had concentrations greater than the soil screening levels of 27 mg/kg for arsenic and 400 mg/kg for lead. A summary of the sediment sample analytical results is provided in Table 3-5 and depicted on Figure 3-4.

3.8 Waste Characterization Results

Seven soil samples were analyzed for TCLP metals during the 2008 investigation. In general, samples were composited from the ground surface to the depth at which laboratory analyses indicated the presence of arsenic and/or lead at concentrations above the SSALs. The purpose of the TCLP analyses is to provide data which may be used to characterize the impacted soil for off-site disposal.

All seven soil samples analyzed for TCLP metals were less than the Resource Conservation and Recovery Act (RCRA) standards described in 40 CFR Part 261.24 that determine if the soil may be a characteristically hazardous waste. TCLP arsenic was not detected in any of the soil samples analyzed and the maximum concentration of TCLP lead was 1.36 milligrams per liter (mg/L). A summary of the waste characterization results is presented in Table 3-6.

3.9 Investigation-Derived Waste Sampling and Disposal

A total of 48 drums (11 containing liquid and 37 containing soil/sampling debris/personal protective equipment) were generated during the sampling activities at the Site. Sample results are presented in Table 3-7. Based on the laboratory analytical results, all waste was classified as non-hazardous material. Haz-Mat Transportation and Disposal, Inc. transported and disposed of aqueous waste materials at their Charlotte, North Carolina facility while the solid waste was transported and disposed at the Allied CMS Landfill located in Concord, North Carolina. Waste was transported and

disposed of in accordance with all applicable regulations. Copies of the waste manifests are provided in Appendix C.

4. Removal Action Strategy

4.1 Introduction

As described in Section 3, arsenic and lead were detected in soil above the USEPA screening levels. To address the arsenic- and lead-impacted soil, EMES will perform a combination of soil excavation activities with off-site disposal and installation of an asphalt cap.

4.2 Removal Action

The removal action for this Site was developed to be protective of human health and the environment. The presence of arsenic and lead in soil above the SSALs represents a potential contact exposure risk to persons working in impacted soil. The following sections describe the removal actions for the Site.

The impacted soil areas have been divided into 7 areas as shown on Figure 4-1. An asphalt cap will be installed over soils in Areas 1, 2, and 3 while the impacted soils in Areas 4, 5, and 6 will be excavated and disposed offsite. Additional areas for soil excavation may be added to the removal action based on the results of the additional soil sampling in Area 7 that will be conducted to the west of the branch of Sugar Creek.

4.2.1 Installation of an Asphalt Cap

The first portion of the removal plan for this Site includes the installation of a cover system over Areas 1, 2 and 3 as shown on Figure 4-1 for a total of approximately 4.8 acres capped (Table 4-1). Based on the current use of the property, the cover in Areas 1, 2, and 3 will consist of an asphalt cap that will minimize the risk for potential contact exposure to persons working on the property. An extra benefit of the asphalt cap is that it will also minimize infiltration of rainwater.

Area 1 houses a TV/radio tower that is accessed from New Street NE. The excavation of soils around the tower is not practical. Area 1 also consists of undeveloped land that if paved could be used as additional storage areas for the Atlanta Public Schools maintenance yard. Area 2 consists of concrete and asphalt pavement that is in poor condition; therefore the asphalt cap in Area 2 would replace the existing pavement. Area 3 consists of an unpaved parking area and equipment lay down area.

4.2.2 Soil Removal

The second portion of the removal plan for this Site includes the excavation and off-site disposal of soil from Areas 4, 5, and 6, and potentially Area 7, as shown on Figure 4-1. Area 4 consists of vegetated undeveloped land and storage/parking areas while Area 5 is a small area just north of a warehouse. Area 6 consists of the creek bed and eastern bank of the branch of Sugar Creek along the western property boundary. Area 7 consists of the western bank of the branch of Sugar Creek west of the property boundary which will be sampled prior to the start of the removal action.

Soil will be removed based on detected concentrations of arsenic and/or lead above the SSALs and the ability to access those soils. The removal of all impacted soil may not be practical due to the presence of subsurface utilities or nearby structures.

Figure 4-1 depicts the horizontal limits of impacted areas which are based on the presence or absence of arsenic or lead above the SSALs in samples collected from soil borings. The vertical limits of impacted soil are based on the maximum depth at which arsenic and/or lead was detected above the SSALs in individual soil borings. The soil removal includes the excavation of soil from approximately 0.85 acres to a depth of 2 feet for a volume of approximately 2,750 cubic yards (Table 4-1). Additional soil may be removed in Area 7 based on the results of the sampling that will be conducted prior to the removal action. Based on the results of the TCLP analyses, impacted soils are classified as non-hazardous soil; therefore, excavated soil will be transported off-site and disposed of at an USEPA-approved non-hazardous waste landfill. Soil removal volumes may increase if sampling in Area 7 indicates the need for additional soil removal in that area.

The intent of the removal action is to remove the maximum amount of impacted soil in Areas 4, 5, and 6 and possibly Area 7 to the extent practicable. If soil removal is not practicable to the maximum depth of impacted soil and arsenic and/or lead are still present in subsurface soils at concentrations above the SSALs, a high visibility, degradation resistant, demarcation liner will be installed at the base of the excavation and backfilled in place to identify the boundary between backfilled soil and unexcavated soil that contains arsenic and/or lead above SSALs.

4.2.3 Groundwater

The results of the groundwater sampling activities in 2008 indicate concentrations of arsenic and lead are below USEPA's MCLs. Therefore, no further action is needed for

groundwater. The six groundwater monitoring wells (ATL-MW-01 through ATL-MW-06) will be abandoned during the removal action.

4.2.4 Deed Restrictions

Areas where arsenic and/or lead have been detected above the SSALs that have impacted soil remaining at the conclusion of the removal action will be deed-restricted to limit the future use of the property and will be enrolled in a maintenance and monitoring program implemented by EMES. This program will include periodic (annual) inspections/maintenance to document the condition of the property, and will preserve the integrity of the restored areas and prevent exposure to, or excavation of, impacted soils by the property owner and utility workers. In the event that it becomes necessary in the future to excavate or remove additional impacted soil, soil removal activities will be coordinated with, and performed by, representatives of EMES.

5. Removal Action Work Plan

5.1 Introduction

The Removal Action Work Plan (RAWP) presented in this section has been prepared to outline the technical approach and methods for conducting a removal action at the Site. This RAWP includes two types of removal actions. The first includes the excavation and offsite disposal of select soils that exceed SSALs. Excavated areas will be backfilled and restored to existing conditions to the extent practicable, or in a manner that is acceptable to ExxonMobil and the affected property owners. The second type of removal action is the installation of a cover system over other soils that also exceed the SSALs.

Because residual concentrations of arsenic and/or lead above SSALs will remain beneath the cover system and may remain beneath excavated surfaces in some limited areas, ExxonMobil will negotiate deed restrictions with the affected property owners following the completion of the removal action. Properties where arsenic and/or lead remain will also be enrolled in an annual monitoring program that includes inspections to maintain the integrity of the restored areas and ground cover, and assistance to property owners or utility companies if it becomes necessary to excavate impacted soils that remain at the Site.

This RAWP provides a description of the overall strategy for implementation of the removal action at the Site. Detailed plans for implementing this strategy, including the protection of workers during construction activities, will be prepared by EMES's Removal Action Contractor (RAC). Plans prepared by the RAC will be submitted to USEPA for review, comment, and approval prior to the start of work.

5.1.1 Work Plan Objectives

The objectives of the removal action are to:

- Excavate and dispose of selected commercial areas with soil containing greater than or equal to 800 mg/kg of lead and 27 mg/kg of arsenic, to the extent practicable, in a manner satisfactory to USEPA;
- Excavate and dispose of selected residential areas with soil containing greater than or equal to 400 mg/kg of lead and 27 mg/kg of arsenic, to the extent practicable, in a manner satisfactory to USEPA;

- Backfill all excavated areas with imported materials;
- Restore the affected properties, to the extent practicable;
- Install a cover system over selected commercial areas with soil containing greater than or equal to 800 mg/kg of lead and 27 mg/kg of arsenic; and
- Repair fences, hard features, etc., in the event of accidental contact/damage.

5.2 Project Organization

This section describes the roles of the various organizations involved in developing and implementing the removal action.

5.2.1 Regulators/Agencies

The USEPA is the lead regulatory agency for this project. The USEPA On-Scene Coordinator (OSC) will be responsible for providing and coordinating regulatory oversight and direction, as necessary, including the review, comment, and approval of all required submittals. The USEPA OSC, or their designee, will also perform field oversight of all removal activities on behalf of the USEPA.

5.2.2 Responsible Party

EMES is the party responsible for VCC-related impacts to the Site. While the interests of EMES will be represented in the field by the Engineer and RAC (as described below), representatives of EMES will maintain an active role in the project through periodic Site visits, participation in project meeting updates, and review/approval of project activities and reports. The EMES Project Manager is Mr. Bruce Frink, P.E.

5.2.3 Engineer

On behalf of ExxonMobil, ARCADIS of Cary, North Carolina will be responsible for the engineering aspects of the removal action. General ARCADIS responsibilities include, but are not limited to, the following:

- preparing this RAWP and appendices;
- prepare asphalt cap design;

- reviewing materials prior to submittal to the USEPA;
- interfacing with regulatory agency personnel;
- collecting post-excavation and waste characterization samples;
- preparing and submitting status reports to the USEPA;
- managing field activities; and
- preparing and submitting the final report to the USEPA.

ARCADIS has designated Ms. Corinda Chwalek, P.E. as the Project Manager to oversee implementation of the above activities.

5.2.4 Removal Action Contractor

EMES will retain a RAC to perform the removal action. Responsibilities of the RAC include, but are not limited to, the following:

- preparing and submitting all plans, permits, and other submittals specified in this RAWP for approval by EMES and the USEPA;
- providing the labor, material, and equipment necessary to complete the removal activities in accordance with this RAWP and the approved project plans;
- coordinating the handling, transport, and disposal of waste material, including soils, residuals, and personal protective equipment;
- performing surveying; and
- providing site health and safety monitoring.

The RAC will appoint one member of its onsite team as the Site Supervisor. The Site Supervisor will be a qualified professional with experience in removal actions and will coordinate all activities in accordance with the RAWP. In the event that an unexpected circumstance may hinder or prevent the RAC from adhering to the RAWP or approved project plans, the Site Supervisor will consult immediately with the Engineer.

5.2.5 Waste Disposal Facility

Excavated soil that does not contain TCLP concentrations of lead or arsenic above 5 mg/L may be disposed at the following RCRA Subtitle D landfill:

Waste Management, Inc. / R & B Landfill
610 Bennett Road
Homer, Georgia 30547
Landfill Permit No.: 006-009 D

Excavated soil that contains TCLP concentrations of lead or arsenic above 5 mg/L will either be stabilized onsite and disposed of at one of the facilities described above, or will be disposed of offsite without stabilization at the following RCRA Subtitle C landfill:

Chemical Waste Management
P.O. Box 55
Highway 17 North, Mile Marker 163
Emelle, AL 35459
205-652-8156
RCRA No.: ALD000622464

Notifications for scheduled waste shipments will be submitted to the USEPA OSC prior to shipment.

5.2.6 Analytical Laboratory

TestAmerica has been selected for the analysis of post-excavation confirmation samples collected as part of this project. Additional laboratories will not be used to process confirmation samples from the Site without prior approval from the USEPA.

5.3 Technical Approach and Scope of Work

This removal action consists of soil removal activities and installation of an asphalt cap. Figure 4-1 depicts the impacted areas, areas for soil removal and approximate depths, and areas for the installation of the cover system. Select areas containing impacted media will be excavated and disposed of off-site in accordance with all applicable regulations. Excavated soil areas will be backfilled with imported fill and restored as described in Section 5.3.11 and restored to pre-existing conditions. A cover system

consisting of an asphalt cap will be installed over select areas containing impacted media.

The following sections describe these activities in more detail.

5.3.1 Asphalt Cap Design

Once the overall strategy for the Site has been approved by USEPA, EMES and ARCADIS will meet with the affected property owners to discuss the design of the asphalt cap. The cap will be designed based on the intended use by the property owner.

5.3.2 Securing Access Agreements for Construction

Upon approval by the USEPA, EMES will then begin contacting affected property owners to obtain access agreements to perform the work. No work will be performed on any property until a reasonable access agreement has been signed by the existing property owner.

5.3.3 Mobilization

Prior to mobilization, the RAC will prepare submittals for review and approval by the USEPA. These submittals include a Site Operations Plan (which includes an Erosion and Sedimentation Control Plan, Traffic Control Plan, Dust Control Plan, Noise Control Plan, Stormwater Management Plan, Decontamination Plan, Site Security Plan, Project Schedule, and Contingency Plan) and a Health and Safety Plan (HASP). A detailed description of the required contents of these submittals is presented in Section 5.3.10. Equipment and personnel needed to implement the removal action will then be mobilized to the Site. Local suppliers for goods and services (e.g., water, portable toilets, landscaping materials) will be identified upon mobilization to the Site.

5.3.4 Preparation of the Site for Removal Activities

The following sections describe the activities that will be performed at the Site to prepare for the intrusive phases of the removal action.

5.3.4.1 *Installation of Erosion and Sediment Control Measures*

Erosion and sediment control (E&SC) measures (e.g., silt fence, hay bales) will be installed at the Site to prevent the migration of soil-bound contaminants to surface water bodies. The type and location of E&SC measures to be installed will be specified in the E&SC Plan prepared by the RAC. E&SC measures will be inspected regularly by the RAC to monitor their continued effectiveness. Additional E&SC measures will be installed, as necessary, as the removal action progresses to prevent the transport of eroded soil from the Site.

Appropriate measures will be taken to minimize the volume of water accumulating in areas of disturbed soil that potentially contain elevated metals concentrations. Water that does not come into direct contact with disturbed soil will be directly discharged into the appropriate drainage feature. Water that has contacted disturbed soil that potentially contains elevated levels of arsenic or lead will be sampled and/or treated in accordance with the Stormwater Management Plan prepared by the RAC prior to removal for offsite disposal or discharge.

5.3.4.2 *Subsurface Utility Markout*

All necessary precautions will be taken to protect the various subsurface and aboveground utilities that exist at the Site from damage. A review of all available Site plans and/or as-builts will be conducted to identify the general location of subsurface utilities. Necessary permits and utility clearances will be obtained prior to any subsurface activities. The utility companies (and/or any private organization that is authorized by the utility companies to delineate the presence of all subsurface services) will be contacted at least 72 hours before onsite intrusive activities are started. A utility markout will be conducted at the Site to locate all subsurface utilities (e.g., electrical, telephone, cable television). In addition, a private utility locating contractor (or equivalent) will scan the area for the presence of subsurface utilities prior to excavation. The field copy of the Site plans will then be updated with the information obtained from the markout. During the markout, the location of aboveground utilities will also be identified. Section 5.3.7 describes the minimum requirements that will be taken to protect the utilities.

5.3.5 *Clearing and Grubbing*

Clearing and grubbing of the soil removal and cover areas will be performed prior to or concurrent with soil excavation activities. The aboveground portions of the trees will

either be disposed of off-site or chipped and reused on-site for the construction of haul roads and/or dust control. Portions of the vegetation in contact with the soil (e.g., stumps, roots) will be excavated with the soil and disposed of off-site.

5.3.6 Installation of a Cover System

One portion of the removal plan for this Site includes the installation of a cover system over two areas of the Site. As shown on Figure 4-1, Areas 1, 2, and 3 include approximately 4.8 acres. Based on the current use of the property, the proposed cover system will consist of an asphalt cap installed over impacted soils to prevent potential contact exposure to persons working on the property and to minimize infiltration of surface water through the impacted soils. The cover will be designed based on the property owners intended use which may include a parking lot or storage area with light to moderate truck usage.

ARCADIS will provide a design for the asphalt cover system. The cover system will be designed by a registered professional engineer and would have the following qualities:

- Permeability such as to minimize surface water infiltration;
- Sufficient strength to support vehicle traffic;
- Durability with low maintenance; and
- Ease of construction.

The cover design will also consider the following:

- The expected size and load classifications of vehicles;
- Surface drainage;
- Impacts to the adjacent creek; and
- An annual maintenance plan of pavement inspection, early detection and repair of cracks and surface breaks, and provisions for repair and/or re-pavement.

5.3.6.1 Proposed Cap Design and Installation

The asphalt cap will be designed to promote stormwater runoff to a collection and drainage system with a discharge to the branch of Sugar Creek. The cap will contain the majority of the stormwater on-site and will prevent flow from the bordering properties from entering the Site.

Any materials excavated to reach the proposed subgrades prior to installation of the asphalt cap will be disposed offsite with the other soils excavated as part of this removal action. Additional fill, if necessary, will be completed with granular subbase material. Grading and contouring specifications will be included with the cover system design prepared by ARCADIS.

The asphalt cap will include a granular subbase, bituminous base course, and bituminous top layer placed on a prepared subgrade. A typical cross-section of the asphalt cap is provided in Figure 5-1. The final design specifications for the material, placement, and compaction will be submitted by ARCADIS.

5.3.6.2 Asphalt Cap Maintenance

Following completion of the asphalt cap construction activities, the asphalt will be allowed to cure for approximately two weeks. The asphalt will be inspected annually by EMES to determine if/when maintenance activities are required to maintain the integrity of the cap. Maintenance activities may include patching of holes, sealing of cracks, and filling of depressions, if any. The storm water management system will also be inspected annually and cleaned as warranted.

5.3.7 Excavation of Impacted Soil

The second portion of the removal action plan includes the excavation and off-site disposal of arsenic- and lead-impacted soil. To the extent practicable, soil will be excavated from the areas described in Section 4.2 and shown on Figure 4-1, loaded into trucks, and transported to a RCRA Subtitle D landfill. The estimated areal dimensions, depths, and in-place volumes for each excavated area are presented in Table 4-1. Soil will generally be removed using standard construction equipment (e.g., backhoe, trackhoe) and manual shoveling. Large pieces of construction debris (e.g., chunks of concrete, brick foundations), greater than or equal to approximately 1 cubic yard, will either be left in place or will be cleaned and left on site at a location agreeable to the property owner. Dry decontamination methods (e.g., brushing) will be used to remove impacted soil from the surfaces of this debris. Wet decontamination methods, such as pressure washing, may be used to remove residual soils if dry decontamination methods are not adequate. Smaller debris such as bricks will be excavated and handled with the excavated soil.

The depth of excavation at the Site will generally be 2 feet bgs; however, the actual limits of excavation will be determined in the field based on the results of the

confirmation soil sampling program and the presence of subsurface utilities. The initial depth of excavation of 2 feet is based on data generated from soil sampling performed in 2006 and 2008.

Excavation sidewalls adjacent to paved areas will be sloped to prevent undermining. At the elevation of the bottom of the pavement, excavation will be performed at least 6 inches laterally from the toe of the pavement before deeper excavation continues. Additional excavation will be performed by sloping or benching the excavation adjacent to these areas at a slope no greater than a 1V:2H. The RAC will perform a structural analysis prior to mobilization to evaluate whether less aggressive sloping may be required to protect existing Site structures. The RAC's structural analysis will be included in the Site Operations Plan.

Waste characterization analyses have been performed at select boring locations within the excavation areas. The purpose of this sampling was to characterize impacted soils for disposal. Soil sample results indicate that the soil TCLP concentrations were less than the regulatory standards and therefore can be disposed of at a RCRA Subtitle D landfill. It should be noted that excavated soils disposed of off-site will, at a minimum, be required to pass USEPA's liquid waste characterization test (also known as the paint filter test).

Excavation within utility corridors will be conducted by hand or in accordance with utility owner specifications, whichever is more stringent. No mechanical excavation (e.g., by excavators) will take place within 2.5 feet of a marked subsurface utility. All excavation to be performed within 2.5 feet of a marked subsurface utility (except as specified above) will be performed manually. Utilities will be protected in the manner prescribed by the utility company. The following describes the general actions that will be taken to protect the utilities:

1. Excavation of soil above and adjacent to a known utility will be performed manually in accordance with the methods, tolerances, and directions specified by the utility owner. At a minimum, all excavation above or within 2.5 feet of a marked utility will be performed manually. The use of an air spade or other similar equipment to remove soil around utilities will be discussed with utility owners on an individual basis.
2. Soil beneath any piped utilities or electric lines may be removed based on the ability to relocate the utility during excavation. Piped utilities include water lines and underground drain lines (if present). Piped utilities do not include phone

lines and cable television lines. These lines are generally flexible and can be relocated within the excavation areas as work progresses.

3. If piped utilities are to be left in place during excavation, a soil shelf equal to the width of the pipe, plus a minimum of 6 inches on each side of the pipe will be left in place beneath the exposed piped utility for support. Soil beneath the piped utilities will then be sloped from the top edge of the shelf to the bottom of the excavation at a slope no greater than 1V:2H.

Modifications to the above procedures may be proposed and, if approved, included in the Site Operations Plan (Section 5.3.10.1).

5.3.8 Confirmation Sampling Plan

A confirmation sampling and analysis program will be conducted during the soil removal work to guide the excavation activities and confirm that impacted materials have been removed.

Following removal of the soil to the initial depths listed in Table 4-1 and shown on Figure 4-1, field screening will be conducted at the base of the excavation using a portable XRF instrument. If XRF screening of the surficial soil at the base of the excavation indicates that arsenic and/or lead concentrations are greater than the SSALs, additional rounds of soil removal and XRF screening will be conducted, as appropriate, to verify that sufficient soil has been removed from the excavation. This XRF screening procedure may be modified in the field, as necessary, to improve its effectiveness.

Upon completion of soil removal activities, one five-point composite sample will be collected from each 0.25-acre area excavated. All samples will be collected from the base of the excavation from 0 to 6 inches below ground surface and will be analyzed for total arsenic and lead. Samples, including field QC samples, will be collected and analyzed in accordance with the procedures in the Field Sampling Plan and QAPP included in the Work Plan.

Rapid (24- to 48-hour) turn-around of sample analyses will be requested so that results can be reviewed and evaluated prior to the onset of backfilling. If analyses indicate arsenic and lead concentrations are below the SSALs, the excavation area will be backfilled and restored as described in Section 5.3.11. However, if arsenic or lead are

detected at concentrations above the SSALs, additional rounds of vertical soil removal and confirmation sampling will be conducted as appropriate.

5.3.9 Transport to Disposal Facility

Results of TCLP analyses of onsite soils have indicated that excavated soils are suitable for transport to a RCRA Subtitle D landfill for disposal. The RAC will be responsible for coordinating and scheduling the transport vehicles and loading the materials. All waste streams will be characterized before disposal, as required by applicable federal, state, and local laws, rules, and regulations, as well as any additional requirements imposed by the receiving landfill or disposal facility.

Excavated soil will be loaded into dump trucks for transport to the disposal facility. Traffic patterns will be established in the Traffic Control Plan to minimize or prevent trucks that are hauling soil offsite from traversing bare soil in impacted areas. Trucks that traverse areas containing impacted soils will be decontaminated prior to exiting the impacted areas. Decontamination procedures will be described in the RAC's Site Operations Plan.

All containers used for the offsite transport of materials will be covered with tarps prior to offsite transport. The RAC will be responsible for verifying that all transportation containers are tarped, manifested, and placarded in accordance with appropriate RCRA and Department of Transportation (DOT) requirements before leaving the Site.

The weight of the transportation containers prior to departure from the Site will be within its allowable loaded capacity for subsequent transport and in compliance with any and all DOT regulations. A daily log of information that includes the date and time, container identification number, and measured weight of each loaded transportation container to have departed the Site will be compiled.

5.3.10 Submittals

The RAC will prepare documents that describe in detail how the project will be performed. The following documents will be submitted to USEPA for review and comment/approval prior to mobilization to the Site:

- Site Operations Plan; and
- HASP.

The contents of each of these plans are described in the following sections.

5.3.10.1 Site Operations Plan

The RAC will prepare a Site Operations Plan that will include, but not be limited to, the following items:

- detailed description of the strategy and procedures to be used to accomplish the work;
- ✓ • detailed description of the sequence of Site excavation and restoration activities;
- detailed description of the procedures used to document pre-removal Site conditions;
- list of equipment to be used onsite;
- proposed locations for storage areas, access roads, and material loading areas;
- structural analysis defining safe excavation tolerances adjacent to buildings, utility poles, and other structures or areas covered with pavement;
- Erosion and Sedimentation Control Plan;
- Traffic Management Plan;
- Dust Control Plan;
- Noise Control Plan;
- Stormwater Management Plan;
- Excavation Equipment Decontamination Plan;
- Site Security Plan;
- Contingency Plan; and
- Project Schedule.

The Site Operations Plan will summarize the materials, procedures, controls, and equipment that the RAC intends to utilize during performance of the removal action. The Site Operations Plan will address all appropriate issues associated with performing the work and will include detail sufficient for USEPA review and approval.

To the extent possible, all utilities should remain operable. Any temporary shutdown of utilities will be scheduled in advance and coordinated with the local utility companies, affected property owner(s), and representatives of EMES. To the extent possible, open excavation areas will also be minimized.

Erosion and Sedimentation Control Plan

During the performance of the removal action, the RAC will take all necessary precautions to protect the environment. In doing so, the RAC will protect all water courses, surface waters, groundwater, soils, and air from degradation or damage in accordance with all federal, state, and local laws and regulations.

The RAC will prepare an Erosion and Sediment Control Plan that will describe procedures and controls that will be employed to prevent accelerated erosion of areas subject to remediation and to prevent excess sedimentation in drainage pathways. At a minimum, this will include the placement and maintenance of silt fences or other appropriate controls at the appropriate locations around all excavations and temporary material staging areas. All erosion and sedimentation control measures will be inspected regularly and especially after any significant rainfall event to document that maximum control continues to be provided. Following inspection, the erosion and sedimentation control measures will be modified, cleaned, reinforced, replaced, and/or maintained, as necessary.

Permanent erosion control measures will also be installed at the Site in Area 6. This will consist of a riprap lined slope from the asphalt cap in Area 1 to the branch of Sugar Creek. The riprap will also serve as stabilization for the bank and cap. The design of the permanent erosion control measures will be submitted by ARCADIS prior to installation.

Traffic Management Plan

The RAC will prepare a Traffic Management Plan that will describe procedures for the movement of trucks and equipment across the Site and to the selected disposal facility in a safe and responsible manner. The Traffic Management Plan will include descriptions of traffic and/or equipment flow patterns across the Site, descriptions of how trucks transporting materials to the landfill will be staged, and other appropriate provisions for personnel (e.g., flagmen, traffic cones, signs) that will be required to promote the safe passage of trucks/equipment across and adjacent to the Site.

Dust Control Plan

Dust will be controlled based on visual observations and the results of airborne particulate monitoring performed by the RAC. Measures will be taken to control dust produced by excavation, backfilling, loading, and other work-area activities. The RAC

will develop a Dust Control Plan to address the safety of the workers and nearby residents. In the event that action levels are exceeded, the RAC will investigate the source of the particulates and reduce work productivity and/or employ dust-control measures. Appropriate dust-control measures include spraying equipment and excavation faces with a fine water mist and covering excavated areas and materials with polyethylene after excavation activities. A supply of water and means of dispersion (e.g., a water tank and sprayer) will be maintained onsite for immediate dust control, if necessary. The RAC's plan will identify methods for dust control and provisions for work stoppage based on the appropriate dust action levels.

Noise Control Plan

The RAC will provide for noise monitoring to evaluate employee exposure levels and potential impacts to nearby residents. The Noise Control Plan will include provisions for Site monitoring (including methods and frequency), hearing protection for workers, and limited work schedules in the event that excessive noise is anticipated. If specific work types result in unacceptable noise levels (> 85 decibels) at the perimeter of the exclusion zone around the excavations, the RAC will make provisions for installing noise control measures and/or using alternate equipment or work procedures.

Stormwater Management Plan

To the extent possible, the RAC will make all appropriate provisions to minimize the volume of water accumulating in disturbed areas (i.e., open excavation areas, stockpile areas) containing impacted soils. The RAC will prepare a Stormwater Management Plan that (1) describes the means and methods that will be used to minimize the accumulation of stormwater in these areas, and (2) identifies the requirements and procedures for sampling and disposing of water contacting impacted soils. The plan will address coordination of disposal with the publicly owned treatment works or other permitted facility and will provide procedures that will ensure that all water discharged meets all applicable standards and requirements. Water that does not come into direct contact with disturbed soil can be rerouted and directly discharged into the appropriate drainage feature.

Excavation Equipment Decontamination Plan

The RAC will prepare a decontamination plan that describes the measures to be used to remove impacted materials from excavation equipment prior to leaving the exclusion zone. Portions of the excavation equipment and transport vehicles that come into

contact with impacted soil will be decontaminated prior to leaving the Site or relocated to an area that does not contain elevated concentrations of arsenic and/or lead. Decontamination wastes will be combined with other materials being excavated from the Site and will be transported to a RCRA Subtitle D landfill.

Site Security Plan

The RAC will prepare a Site Security Plan that describes the measures to be used to safeguard equipment and prevent unauthorized access to open excavation areas and other work areas during the removal action. At a minimum, Site security includes 24-hour surveillance and restrictive barriers around all open excavation areas and other areas where hazards may be present.

Contingency Plan

The RAC will prepare a Contingency Plan that includes, at a minimum, the following items:

- Spill Prevention Control and Countermeasures Plan for all materials brought to the work area;
- emergency vehicular access/egress;
- emergency action/evacuation procedures of personnel from the work area;
- listing of all contact personnel with phone numbers, including EMES; the RAC; the Engineer; fire officials; ambulance service; local, county, and State Police; and local hospitals, including routes to local hospitals and procedures for notifying each;
- listing of all contact personnel with phone numbers for the owners of above- and below-ground utilities who are to be contacted in case of damage to any utilities; and
- identification of responsible personnel who will be in a position at all times to receive incoming phone calls and to dispatch contractor personnel and equipment in the event of an emergency situation.

Project Schedule

A Project Schedule will be prepared that includes all elements of the removal action. Work may be conducted Monday to Friday between 8:00 a.m. and 5:00 p.m. Additional requirements include:

- horizontal bar chart (Gantt) with separate lines for each section of work, identifying the first work day of each week;
- at a minimum, the following work items:
 - mobilization;
 - site preparation;
 - excavation activities;
 - restoration activities;
 - demobilization; and
- revision and submittal of a construction progress schedule on a weekly basis.

5.3.10.2 Health and Safety Plan

The RAC will prepare, submit, and implement a site-specific HASP that, at a minimum, meets the requirements of 29 CFR 1910 and 29 CFR 1926 (which includes 29 CFR 1926.65) and any applicable state regulations. The HASP will be prepared by a Certified Industrial Hygienist and cover all personnel who will be employed by the RAC to perform work at the Site, including direct employees and subcontractors.

For work involving the potential for contact with or exposure to arsenic- and/or lead-containing soils, the HASP will comply with 29 CFR 1910, 29 CFR 1926, 40 CFR 260-267, and related regulations that call for the development and implementation of a safety and health program for employees involved in hazardous waste operations.

The HASP will be prepared in accordance with 40 CFR 1910.120 and 29 CFR 1926.65 and will address, at a minimum, the following components:

1. Identification of Key Personnel – Identify, by name and by title, the on- and offsite health and safety personnel responsible for the implementation of health and safety procedures. All onsite personnel involved in the measures must have Occupational Safety and Health Administration (OSHA) 40-hour Hazardous Waste Training (29 CFR 1910.120 and 1926.65) and the corresponding 8-hour refresher course update. In addition, all onsite personnel must have completed the initial Loss Prevention System™ safety training program required by EMES.
2. Training – Describe and provide certification of all supervisory and onsite personnel having received appropriate health and safety training. Training requirements will also include attending an initial work-area orientation before

engaging in any onsite activities. Sign-off sheets acknowledging attendance will be provided.

3. Medical Surveillance – Certify that all supervisory and onsite personnel have received appropriate medical examinations and are able to conduct the tasks required for this project, including, but not limited to, working with chemicals, using respiratory protection, using PPE, and conducting hazardous waste operations in accordance with 29 CFR 1910.120 and 1926.65. Medical monitoring may also include additional clearances as required by EMES.
4. Task-Specific Hazard/Risk Analysis – Identify and provide a means of mitigating all foreseeable biological, chemical, and physical hazards associated with the work, including, but not limited to, hazards associated with exposure to contaminants of concern, heavy equipment operation, work area conditions, weather, biological hazards, materials handling, and work around excavated areas.
5. Work Zones – Provide a work area plan that depicts the designation of zones including: (1) Exclusion Zones; (2) Decontamination Zones; and (3) Support Zones. The level of personal protection for each zone must be included.
6. Personal Safety Equipment and Protective Clothing – Identify personal safety equipment and protective clothing to be used and available onsite. This will include the identification of expected levels of protection (A, B, C, D) for each task, and the action levels for PPE upgrades. A respiratory protection program that meets the requirements of 29 CFR 1910.134 and establishes specific requirements for any respirator use will be included.
7. Personal Air Monitoring – Identify protocols and criteria associated with personal air monitoring of onsite personnel.
8. Personnel Decontamination – Describe methods and procedures to be used for decontamination of site personnel and management of PPE.
9. Material Safety Data Sheets (MSDSs) – Provide MSDSs for all materials to be brought to the work area and constituents that are expected to be encountered in the course of implementation of the removal action.

10. Construction Safety Procedures (OSHA 1926.1 – 1926.652, Subpart A-P) – Provide procedures to address excavation and trenching safety procedures, as well as a daily work area safety inspection checklist to evaluate these items.
11. Standard Operating Procedures and Safety Programs – Provide those required by applicable sections of 29 CFR 1910 and 1926.

Determination of the appropriate level of worker safety equipment, procedures, or modification to equipment and procedures based on work-area conditions will be made by the RAC as a result of work-area visit(s), review of available information, and anticipated work area activities.

5.3.11 Site Restoration

Upon completion of the excavation activities and receipt of acceptable confirmation sample analytical results, the Site will be restored as closely as possible to the pre-excavation conditions, or in an alternate manner that is agreeable to EMES and the affected property owners.

In general, excavation in vegetated areas will be backfilled and compacted within 6 inches of existing grade. The remaining 6 inches will be backfilled with topsoil to support vegetation or ground cover. The excavation area in non-vegetated areas will be backfilled and compacted within 6 inches of existing grade followed by placement of 6 inches of crusher run stone. The fill materials proposed by the RAC for site restoration will be analyzed for pH, grain size, total organic carbon, TAL metals, Target Compound List (TCL) volatile and semi-volatile organic compounds (VOCs and SVOCs), pesticides, and polychlorinated biphenyls (PCBs). Sources that contain elevated concentrations of any of the aforementioned constituents or significantly different physical characteristics (pH, grain size, total organic carbon) than the existing Site soils will be rejected. Sample analytical results will be submitted to USEPA for review and approval prior to use.

5.4 Reporting

5.4.1 Weekly Reports

Brief written progress reports that describe actions taken will be submitted by EMES to the USEPA OSC on a weekly basis. Each weekly report will:

- describe all significant developments of the preceding 7-day period, including actions performed and any problems encountered;
- describe developments anticipated during the next reporting period, including anticipated problems and a schedule of work to be performed; and
- discuss planned resolutions of past and anticipated future problems.

5.4.2 Final Report

A final report summarizing the actions taken will be submitted to the USEPA for review and approval within 60 days of completion of the removal action. The final report will conform, at a minimum, with the requirements of Section 300.165 ("OSC Reports") of the National Contingency Plan and will include the following:

- a listing of the quantities and types of materials removed from the Site;
- discussion of the removal and disposal options considered for removed materials;
- a listing of the ultimate destinations of all removed materials;
- a presentation of the analytical results of all sampling and analyses performed; and
- appendices containing all relevant documentation generated during the removal action (e.g., manifests, permits).

The final report will also include the following certification signed by a person who supervised or directed the preparation of the report:

"Under penalty of law, I certify that, to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

5.5 Institutional Controls

Institutional controls will be implemented for the Site following completion of the removal action. While specific language has not yet been developed, it is expected that the following issues will likely be addressed in the institutional controls:

- a description of the post-removal action Site conditions;
- reference to the Site Delineation Report/RAWP and the Project Removal Action Summary Report; and
- notification that post-removal Site conditions may result in the need for implementation of additional safety procedures during future subsurface construction activities.

5.6 Schedule

It is expected that the activities outlined herein will be completed within approximately 345 days, based on the following task durations.

- | | |
|--|---------|
| • Obtain USEPA approval of this RAWP | 30 days |
| • Obtain Access Agreements from Property Owners | 45 days |
| • Prepare Bid Specifications/Select RAC/Prepare RAC Submittals | 60 days |
| • Obtain USEPA approval of RAC Submittals | 30 days |
| • Conduct Removal Action | 90 days |
| • Prepare/Submit Removal Action Summary Report | 60 days |

The project schedule is dependent, in part, on securing the necessary access agreements from property owners and the RAC's schedule, which will be included in the Site Operations Plan. Other potential issues that could lead to project delays include, but are not limited to, the requisition of necessary permits.

6. References

- ARCADIS. 2008. Site Delineation Work Plan, Atlanta, DeKalb County, Georgia. March 2008.
- BBL. 2005. Preliminary Assessment/Site Inspection Work Plan for VCC – Atlanta, DeKalb County, Georgia. December 2005.
- BBL. 2007. Preliminary Assessment/Site Inspection Report, Former Virginia-Carolina Chemical Corporation Site, Atlanta, DeKalb County, Georgia. January 2007.
- EDR, 2005. The EDR Radius Map with GeoCheck®. Atlanta DeKalb, 1631 DeKalb Avenue, Atlanta, Georgia 30307. Inquiry Number: 1381038.2s. March 17, 2005.
- GA Geological Survey. 1976. Geologic Map of Georgia (internet version). Georgia Geological Survey. Scale: 1:500,000.
<http://home.att.net/~cochran3/rocks01/ggmndx01.htm>
- LeGrand. H.E. 2004. A Master Conceptual Model for Hydrogeological Site Characterization in the Piedmont and Mountain Region of North Carolina: A Guidance Manual. North Carolina Department of Environment and Natural Resources: Division of Water Quality: Groundwater Section.
- USEPA. 1997. Work Plan for Former Phosphate/Fertilizer Plants Initiative, North Charleston, South Carolina. Prepared by Craig Zeller, USEPA Region 4, Atlanta, Georgia, December 16, 1997.

ARCADIS

Tables

Table 2-1
Summary of Sample Analytical Program
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Sample Name	Depth (feet)	Sample Date	Arsenic and Lead Field Measurement	Laboratory Measurement				Comments	
				Arsenic and Lead	pH	TAL Metals	TCLP Metals		
Soil									
ATL-SB-001 (0-0.5')	0-0.5	09/26/06	X	X	X				
ATL-SB-001 (0.5-2')	0.5-2	09/26/06	X	X	X				
ATL-SB-002 (0-0.5')	0-0.5	09/26/06	X	X	X				
ATL-SB-002 (0.5-2')	0.5-2	09/26/06	X	X	X				
ATL-SB-003 (0-0.5')	0-0.5	09/26/06	X	X	X				
ATL-SB-003 (0.5-2')	0.5-2	09/26/06	X	X	X				
ATL-SB-004 (0-0.5')	0-0.5	09/26/06	X	X	X				
ATL-SB-004 (0.5-2')	0.5-2	09/26/06	X	X	X				
ATL-SB-005 (0-0.5')	0-0.5	09/26/06	X	X	X				
ATL-SB-005 (0.5-2')	0.5-2	09/26/06	X	X	X				
ATL-SB-005 (2-4')	2-4	09/26/06	X	X	X				
ATL-SB-006 (0-0.5')	0-0.5	09/26/06	X	X	X				
ATL-SB-006 (0.5-2')	0.5-2	09/26/06	X	X	X				
ATL-SB-006 (2-4')	2-4	09/26/06	X	X	X				
ATL-SB-007 (0-0.5')	0-0.5	09/26/06	X	X	X				
ATL-SB-007 (0.5-2')	0.5-2	09/26/06	X	X	X				
ATL-SB-008 (0-0.5')	0-0.5	09/26/06	X	X	X				
ATL-SB-008 (0.5-2')	0.5-2	09/26/06	X	X	X				
ATL-SB-009 (0-0.5')	0-0.5	09/26/06	X	X	X				
ATL-SB-009 (0.5-2')	0.5-2	09/26/06	X	X	X				
ATL-SB-010 (0-0.5')	0-0.5	09/26/06	X	X	X				
ATL-SB-010 (0.5-2')	0.5-2	09/26/06	X	X	X				
ATL-SB-011 (0-0.5')	0-0.5	09/26/06	X	X	X				
ATL-SB-011 (0.5-2')	0.5-2	09/26/06	X	X	X				
ATL-SB-012 (0-0.5')	0-0.5	09/26/06	X	X	X				
ATL-SB-012 (0.5-2')	0.5-2	09/26/06	X	X	X			MS/MSD	
ATL-SB-DUP-01	NA	09/26/06		X	X			Field Duplicate of ATL-SB-012 (0.5-2')	
ATL-SB-013 (0-0.5')	0-0.5	09/26/06	X	X	X				
ATL-SB-013 (0.5-2')	0.5-2	09/26/06	X	X	X				
ATL-SB-013 (2-4')	2-4	09/26/06	X	X	X				
ATL-SB-014 (0-0.5')	0-0.5	09/26/06	X	X	X				
ATL-SB-014 (0.5-2')	0.5-2	09/26/06	X	X	X				
ATL-SB-014 (2-4')	2-4	09/26/06	X	X	X				
ATL-SB-015 (0-0.5')	0-0.5	09/27/06	X	X	X				
ATL-SB-015 (0.5-2')	0.5-2	09/27/06	X	X	X				
ATL-SB-015 (2-4')	2-4	09/27/06	X	X	X				
ATL-SB-016 (0-0.5')	0-0.5	09/27/06	X	X	X				
ATL-SB-016 (0.5-2')	0.5-2	09/27/06	X	X	X				
ATL-SB-DUP-03	NA	09/27/06		X	X			Field Duplicate of ATL-SB-016 (0.5-2')	

Table 2-1
Summary of Sample Analytical Program
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Sample Name	Depth (feet)	Sample Date	Arsenic and Lead Field Measurement	Laboratory Measurement				Comments
				Arsenic and Lead	pH	TAL Metals	TCLP Metals	
ATL-SB-016 (2-2.5')	2-2.5	09/27/06	X	X	X			
ATL-SB-017 (0-0.5')	0-0.5	09/27/06	X	X	X			
ATL-SB-017 (0.5-2')	0.5-2	09/27/06	X	X	X			
ATL-SB-017 (2-4')	2-4	09/27/06	X	X	X			
ATL-SB-018 (0-0.5')	0-0.5	09/27/06	X	X	X			
ATL-SB-018 (0.5-2')	0.5-2	09/27/06	X	X	X			
ATL-SB-019 (0-0.5')	0-0.5	09/27/06	X	X	X			
ATL-SB-019 (0.5-2')	0.5-2	09/27/06	X	X	X			
ATL-SB-020 (0-0.5')	0-0.5	09/27/06	X	X	X			
ATL-SB-020 (0.5-2')	0.5-2	09/27/06	X	X	X			
ATL-SB-020 (4-6')	4-6	06/11/08	X	X	X			
ATL-SB-021 (0-0.5')	0-0.5	09/27/06	X	X	X			
ATL-SB-021 (0.5-2')	0.5-2	09/27/06	X	X	X			
ATL-SB-021 (2-4')	2-4	09/27/06	X	X	X			
ATL-SB-022 (0-0.5')	0-0.5	09/27/06	X	X	X			
ATL-SB-022 (0.5-2')	0.5-2	09/27/06	X	X	X			
ATL-SB-022 (2-4')	2-4	09/27/06	X	X	X			
ATL-SB-023 (0-0.5')	0-0.5	09/27/06	X	X	X			
ATL-SB-023 (0.5-2')	0.5-2	09/27/06	X	X	X			
ATL-SB-023 (2-4')	2-4	09/27/06	X	X	X			
ATL-SB-025 (0-0.5')	0-0.5	09/27/06	X	X	X			
ATL-SB-025 (0.5-2')	0.5-2	09/27/06	X	X	X			
ATL-SB-025 (2-4')	2-4	09/27/06	X	X	X			
ATL-SB-026 (0.5-2')	0.5-2	09/28/06	X	X	X			
ATL-SB-026 (2-4')	2-4	09/28/06	X	X	X			
ATL-SB-026 (6-8')	6-8	09/28/06	X	X	X			
ATL-SB-026 (8-10')	8-10	09/28/06	X	X	X			
ATL-SB-027 (0-0.5')	0-0.5	09/27/06	X	X	X			
ATL-SB-027 (0.5-2')	0.5-2	09/27/06	X	X	X			
ATL-SB-027 (4-6')	4-6	06/12/08	X	X	X			
ATL-SB-028 (0.5-1')	0.5-1	09/27/06	X	X	X			
ATL-SB-028 (4-6')	4-6	06/12/08	X	X	X			MS/MSD
ATL-SB-028 (4-6')	4-6	06/12/08	X	X	X			
ATL-SB-029 (0-0.5')	0-0.5	09/27/06	X	X	X			
ATL-SB-029 (0.5-2')	0.5-2	09/27/06	X	X	X			
ATL-SB-029 (2-4')	2-4	09/27/06	X	X	X			
ATL-SB-030 (0.5-2')	0.5-2	09/27/06	X	X	X			MS/MSD
ATL-SB-030 (2-4')	2-4	09/27/06	X	X	X			
ATL-SB-031 (0.5-2')	0.5-2	09/27/06	X	X	X			
ATL-SB-DUP-04	NA	09/27/06		X	X			Field Duplicate of ATL-SB-031 (0.5-2')

Table 2-1
Summary of Sample Analytical Program
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Sample Name	Depth (feet)	Sample Date	Arsenic and Lead Field Measurement	Laboratory Measurement			Comments
				Arsenic and Lead	pH	TAL Metals TCLP Metals	
ATL-SB-031 (2-4')	2-4	09/27/06	X	X	X		MS/MSD
ATL-SB-032 (0-0.5')	0-0.5	09/27/06	X	X	X		
ATL-SB-032 (0.5-2')	0.5-2	09/27/06	X	X	X		
ATL-SB-033 (0-0.5')	0-0.5	09/27/06	X	X	X		
ATL-SB-033 (0.5-2')	0.5-2	09/27/06	X	X	X		
ATL-SB-033 (2-4')	2-4	09/27/06	X	X	X		
ATL-SB-034 (0-0.5')	0-0.5	09/28/06	X	X	X		
ATL-SB-034 (0.5-2')	0.5-2	09/28/06	X	X	X		
ATL-SB-035 (0-0.5')	0-0.5	09/28/06	X	X	X		
ATL-SB-035 (0.5-2')	0.5-2	09/28/06	X	X	X		
ATL-SB-DUP-06	NA	09/28/06		X	X		Field Duplicate of ATL-SB-035 (0.5-2')
ATL-SB-035 (2-4')	2-4	09/28/06	X	X	X		MS/MSD
ATL-SB-036 (0-0.5')	0-0.5	09/27/06	X	X	X		
ATL-SB-036 (0.5-2')	0.5-2	09/27/06	X	X	X		
ATL-SB-036 (2-4')	2-4	09/27/06	X	X	X		
ATL-SB-037 (0-0.5')	0-0.5	09/28/06	X	X	X		
ATL-SB-037 (0.5-2')	0.5-2	09/28/06	X	X	X		
ATL-SB-037 (2-4')	2-4	09/28/06	X	X	X		
ATL-SB-038 (0-0.5')	0-0.5	09/27/06	X	X	X		
ATL-SB-038 (0.5-1.5')	0.5-1.5	09/27/06	X	X	X		
ATL-SB-039 (0-0.5')	0-0.5	09/27/06	X	X	X		
ATL-SB-039 (0.5-2')	0.5-2	09/27/06	X	X	X		
ATL-SB-040 (0-0.5')	0-0.5	09/27/06	X	X	X		
ATL-SB-040 (0.5-2')	0.5-2	09/27/06	X	X	X		
ATL-SB-040 (2-4')	2-4	09/27/06	X	X	X		
ATL-SB-041 (0.5-2')	0.5-2	09/27/06	X	X	X		
ATL-SB-DUP-02	NA	09/27/06		X	X		Field Duplicate of ATL-SB-041 (0.5-2')
ATL-SB-041 (2-4')	2-4	09/27/06	X	X	X		MS/MSD
ATL-SB-042 (0-0.5')	0-0.5	09/28/06	X	X	X		
ATL-SB-042 (0.5-2')	0.5-2	09/28/06	X	X	X		
ATL-SB-042 (2-4')	2-4	09/28/06	X	X	X		MS/MSD
ATL-SB-DUP-05	NA	09/28/06		X	X		Field Duplicate of ATL-SB-042 (0.5-2')
ATL-SB-043 (0.5-2')	0.5-2	09/28/06	X	X	X		
ATL-SB-043 (2-4')	2-4	09/28/06	X	X	X		
ATL-SB-044 (0-0.5')	0-0.5	09/27/06	X	X	X		
ATL-SB-044 (0.5-2')	0.5-2	09/27/06	X	X	X		
ATL-SB-044 (2-4')	2-4	09/27/06	X	X	X		
ATL-SB-045 (0-0.5')	0-0.5	09/28/06	X	X	X		
ATL-SB-045 (0.5-2')	0.5-2	09/28/06	X	X	X		
ATL-SB-045 (2-4')	2-4	09/28/06	X	X	X		

Table 2-1
Summary of Sample Analytical Program
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Sample Name	Depth (feet)	Sample Date	Arsenic and Lead Field Measurement	Laboratory Measurement				Comments
				Arsenic and Lead	pH	TAL Metals	TCLP Metals	
ATL-SB-046 (0-0.5')	0-0.5	09/28/06	X	X	X			
ATL-SB-046 (0.5-2')	0.5-2	09/28/06	X	X	X			
ATL-SB-046 (2-3.5')	2-3.5	09/28/06	X	X	X			
ATL-SB-047 (0-0.5')	0-0.5	09/28/06	X	X	X			
ATL-SB-047 (0.5-2')	0.5-2	09/28/06	X	X	X			
ATL-SB-047 (2-4')	2-4	09/28/06	X	X	X			
ATL-SB-048 (0-0.5')	0-0.5	09/28/06	X	X	X			
ATL-SB-048 (0.5-2')	0.5-2	09/28/06	X	X	X			
ATL-SB-048 (2-4')	2-4	09/28/06	X	X	X			
ATL-SB-049 (0-0.5')	0-0.5	09/28/06	X	X	X			
ATL-SB-049 (0.5-2')	0.5-2	09/28/06	X	X	X			
ATL-SB-050 (0-0.5')	0-0.5	09/28/06	X	X	X			
ATL-SB-050 (0.5-1.75')	0.5-1.75	09/28/06	X	X	X			
ATL-SB-051 (0-0.5')	0-0.5	10/03/06	X	X	X			
ATL-SB-051 (0.5-2')	0.5-2	10/03/06	X	X	X			
ATL-SB-052 (0-0.5')	0-0.5	09/28/06	X	X	X			
ATL-SB-052 (0.5-2')	0.5-2	09/28/06	X	X	X			
ATL-SB-053 (0-0.5')	0-0.5	10/03/06	X	X	X			
ATL-SB-053 (0.5-2')	0.5-2	10/03/06	X	X	X			MS/MSD
ATL-SB-054 (0-0.5')	0-0.5	10/03/06	X	X	X			
ATL-SB-054 (0.5-2')	0.5-2	10/03/06	X	X	X			
ATL-SB-DUP-07	NA	10/03/06		X	X			Field Duplicate of ATL-SB-054 (0.5-2')
ATL-SB-056 (0-0.5')	0-0.5	10/03/06	X	X	X			
ATL-SB-056 (0.5-2')	0.5-2	10/03/06	X	X	X			
ATL-SB-057 (0-0.5')	0-0.5	10/03/06	X	X	X			
ATL-SB-057 (0.5-2')	0.5-2	10/03/06	X	X	X			
ATL-SB-058 (0-0.5')	0-0.5	10/03/06	X	X	X			
ATL-SB-058 (0.5-2')	0.5-2	10/03/06	X	X	X			
ATL-SB-059 (0-0.5')	0-0.5	09/28/06	X	X	X			
ATL-SB-059 (0.5-2')	0.5-2	09/28/06	X	X	X			
ATL-SB-060 (0-0.5')	0-0.5	09/28/06	X	X	X			
ATL-SB-060 (0.5-2')	0.5-2	09/28/06	X	X	X			
ATL-SB-061 (0-0.5')	0-0.5	09/28/06	X	X	X			
ATL-SB-061 (0.5-2')	0.5-2	09/28/06	X	X	X			
ATL-SB-061 (2-4')	2-4	09/28/06	X	X	X			
ATL-SB-065 (0-0.5')	0-0.5	09/27/06	X	X	X			
ATL-SB-065 (0.5-2')	0.5-2	09/27/06	X	X	X			
ATL-SB-065 (2-3.5')	2-3.5	09/27/06	X	X	X			
ATL-SB-065 (4-6')	4-6	06/11/08	X	X	X			
ATL-SB-065 (6-8')	6-8	06/11/08	X	X	X			

Table 2-1
Summary of Sample Analytical Program
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Sample Name	Depth (feet)	Sample Date	Arsenic and Lead Field Measurement	Laboratory Measurement			Comments
				Arsenic and Lead	pH	TAL Metals TCLP Metals	
ATL-SB-066 (0-0.5')	0-0.5	06/10/08	X	X	X		
ATL-SB-066 (0.5-2')	0.5-2	06/10/08	X	X	X		
ATL-SB-067 (0-0.5')	0-0.5	06/10/08	X	X	X		
ATL-SB-067 (0.5-2')	0.5-2	06/10/08	X	X	X		
ATL-SB-067 (2-4')	2-4	06/10/08	X	X	X		
ATL-SB-068 (0-0.5')	0-0.5	06/10/08	X	X	X		MS/MSD
ATL-DUP-08	NA	06/10/08		X	X		Field Duplicate of ATL-SB-068 (0-0.5')
ATL-SB-068 (0.5-2')	0.5-2	06/10/08	X	X	X		
ATL-SB-068 (2-4')	2-4	06/10/08	X	X	X		
ATL-SB-069 (0-0.5')	0-0.5	06/10/08	X	X	X		
ATL-DUP-09	NA	06/10/08		X	X		Field Duplicate of ATL-SB-069 (0-0.5')
ATL-SB-069 (0.5-2')	0.5-2	06/10/08	X	X	X		
ATL-SB-069 (2-4')	2-4	06/10/08	X	X	X		
ATL-SB-070 (0-0.5')	0-0.5	06/10/08	X	X	X		
ATL-SB-070 (0.5-2')	0.5-2	06/10/08	X	X	X		
ATL-SB-070 (2-4')	2-4	06/10/08	X	X	X		
ATL-SB-071 (0-0.5')	0-0.5	06/10/08	X	X	X		
ATL-SB-071 (0.5-2')	0.5-2	06/10/08	X	X	X		
ATL-SB-071 (2-4')	2-4	06/10/08	X	X	X		
ATL-SB-072 (0-0.5')	0-0.5	06/10/08	X	X	X		
ATL-SB-072 (0.5-2')	0.5-2	06/10/08	X	X	X		
ATL-SB-072 (2-4')	2-4	06/10/08	X	X	X		
ATL-SB-072 (4-6')	4-6	06/10/08	X	X	X		
ATL-SB-073 (0-0.5')	0-0.5	06/11/08	X	X	X		
ATL-DUP-10	NA	06/11/08		X	X		Field Duplicate of ATL-SB-073 (0-0.5')
ATL-SB-073 (0.5-2')	0.5-2	06/11/08	X	X	X		
ATL-SB-073 (2-4')	2-4	06/11/08	X	X	X		
ATL-SB-073 (4-6')	4-6	06/11/08	X	X	X		
ATL-SB-073 (6-8')	6-8	06/11/08	X	X	X		
ATL-SB-074 (0-0.5')	0-0.5	06/11/08	X	X	X		
ATL-SB-074 (0.5-2')	0.5-2	06/11/08	X	X	X		
ATL-SB-074 (2-4')	2-4	06/11/08	X	X	X		
ATL-SB-075 (0-0.5')	0-0.5	06/12/08	X	X	X		
ATL-DUP-11	NA	06/12/08		X	X		Field Duplicate of ATL-SB-075 (0-0.5')
ATL-SB-075 (0.5-2')	0.5-2	06/12/08	X	X	X		
ATL-SB-075 (2-4')	2-4	06/12/08	X	X	X		
ATL-SB-075 (4-6')	4-6	06/12/08	X	X	X		
ATL-SB-076 (0-0.5')	0-0.5	06/12/08	X	X	X		
ATL-SB-076 (0.5-2')	0.5-2	06/12/08	X	X	X		
ATL-SB-076 (2-4')	2-4	06/12/08	X	X	X		

Table 2-1
Summary of Sample Analytical Program
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Sample Name	Depth (feet)	Sample Date	Arsenic and Lead Field Measurement	Laboratory Measurement				Comments
				Arsenic and Lead	pH	TAL Metals	TCLP Metals	
ATL-SB-077 (0-0.5')	0-0.5	06/10/08	X	X	X			
ATL-SB-077 (0.5-2')	0.5-2	06/10/08	X	X	X			
ATL-SB-077 (2-4')	2-4	06/10/08	X	X	X			
ATL-SB-077 (4-6')	4-6	06/10/08	X	X	X			
ATL-SB-078 (0-0.5')	0-0.5	06/10/08	X	X	X			
ATL-SB-078 (0.5-2')	0.5-2	06/10/08	X	X	X			
ATL-SB-078 (2-4')	2-4	06/10/08	X	X	X			
ATL-SB-078 (4-6')	4-6	06/10/08	X	X	X			
ATL-SB-079 (0-0.5')	0-0.5	06/11/08	X	X	X			
ATL-SB-079 (0.5-2')	0.5-2	06/11/08	X	X	X			
ATL-SB-079 (2-4')	2-4	06/11/08	X	X	X			
ATL-SB-080 (0-0.5')	0-0.5	06/12/08	X	X	X			
ATL-SB-080 (0.5-2')	0.5-2	06/12/08	X	X	X			
ATL-SB-080 (2-4')	2-4	06/12/08	X	X	X			
ATL-SB-081 (0-0.5')	0-0.5	06/12/08	X	X	X			
ATL-SB-081 (0.5-2')	0.5-2	06/12/08	X	X	X			
ATL-SB-081 (2-4')	2-4	06/12/08	X	X	X			
ATL-SB-082 (0-0.5')	0-0.5	06/12/08	X	X	X			
ATL-SB-082 (0.5-2')	0.5-2	06/12/08	X	X	X			
ATL-SB-082 (2-4')	2-4	06/12/08	X	X	X			
ATL-SB-083 (0-0.5')	0-0.5	06/12/08	X	X	X			
ATL-SB-083 (0.5-2')	0.5-2	06/12/08	X	X	X			
ATL-SB-083 (2-4')	2-4	06/12/08	X	X	X			
ATL-SB-084 (0-0.5')	0-0.5	06/12/08	X	X	X			
ATL-SB-084 (0.5-2')	0.5-2	06/12/08	X	X	X			
ATL-SB-084 (2-4')	2-4	06/12/08	X	X	X			
ATL-SB-085 (0-0.5')	0-0.5	06/12/08	X	X	X			
ATL-SB-085 (0.5-2')	0.5-2	06/12/08	X	X	X			
ATL-SB-085 (2-4')	2-4	06/12/08	X	X	X			
ATL-SB-086 (0-0.5')	0-0.5	06/12/08	X	X	X			
ATL-SB-086 (0.5-2')	0.5-2	06/12/08	X	X	X			
ATL-SB-086 (2-4')	2-4	06/12/08	X	X	X			
ATL-SB-087 (0-0.5')	0-0.5	06/12/08	X	X	X			
ATL-DUP-12	NA	06/12/08		X	X			Field Duplicate of ATL-SB-087 (0-0.5')
ATL-SB-087 (0.5-2')	0.5-2	06/12/08	X	X	X			
ATL-SB-087 (2-4')	2-4	06/12/08	X	X	X			
ATL-SB-088 (0-0.5')	0-0.5	06/12/08	X	X	X			
ATL-SB-088 (0.5-2')	0.5-2	06/12/08	X	X	X			
ATL-SB-088 (2-4')	2-4	06/12/08	X	X	X			
ATL-SBMW-04 (0-0.5')	0-0.5	06/10/08	X	X	X			

Table 2-1
Summary of Sample Analytical Program
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Sample Name	Depth (feet)	Sample Date	Arsenic and Lead Field Measurement	Laboratory Measurement				Comments
				Arsenic and Lead	pH	TAL Metals	TCLP Metals	
ATL-SBMW-04 (0.5-2')	0.5-2	06/10/08	X	X	X			
ATL-SBMW-04 (2-4')	2-4	06/10/08	X	X	X			
ATL-SBMW-05 (0-0.5')	0-0.5	06/10/08	X	X	X			
ATL-SBMW-05 (0.5-2')	0.5-2	06/10/08	X	X	X			
ATL-SBMW-05 (2-4')	2-4	06/10/08	X	X	X			
ATL-SBMW-05 (4-6')	4-6	06/10/08	X	X	X			
ATL-SBMW-05 (6-8')	6-8	06/10/08	X	X	X			
ATL-SBMW-05 (8-10')	8-10	06/10/08	X	X	X			
ATL-SBMW-05 (10-12')	10-12	06/10/08	X	X	X			
ATL-SBMW-05 (12-14')	12-14	06/10/08	X	X	X			
ATL-SBMW-06 (0-0.5')	0-0.5	06/11/08	X	X	X			
ATL-SBMW-06 (0.5-2')	0.5-2	06/11/08	X	X	X			
ATL-SBMW-06 (2-4')	2-4	06/11/08	X	X	X			
ATL-SBMW-06 (4-6')	4-6	06/11/08	X	X	X			
ATL-SBMW-06 (6-8')	6-8	06/11/08	X	X	X			
Waste Characterization Samples								
ATL-SB-067-TCLP (0-4')	0-4	06/10/08		X	X		X	
ATL-SB-069-TCLP (0-2')	0-2	06/10/08		X	X		X	
ATL-SB-082-TCLP (0-4')	0-4	06/10/08		X	X		X	
ATL-SB-MW-05-TCLP (0-4')	0-4	06/10/08		X	X		X	
ATL-SB-MW-05-TCLP (6-12')	6-12	06/10/08		X	X		X	
ATL-SB-073-TCLP (0-6')	0-6	06/11/08		X	X		X	
ATL-SB-MW-06-TCLP (0.5-6')	0.5-6	06/11/08		X	X		X	
Groundwater								
ATL-GW-MW-01	NA	10/11/06		X				
ATL-GW-MW-01	NA	11/09/06		X				
ATL-GW-MW-02	NA	10/12/06		X				MS/MSD
ATL-GW-DUP-01	NA	10/12/06		X				Field duplicate of ATL-GW-MW-02
ATL-GW-MW-02	NA	11/10/06		X				MS/MSD
ATL-GW-DUP-02	NA	11/10/06		X				Field duplicate of ATL-GW-MW-02
ATL-GW-MW-03	NA	10/12/06		X				
ATL-GW-MW-03	NA	11/10/06		X				
ATL-GW-MW-01	NA	06/30/08		X				
ATL-GW-MW-02	NA	06/27/08		X				
ATL-GW-MW-03	NA	06/30/08		X				
ATL-GW-MW-04	NA	06/27/08		X				MS/MSD
ATL-GW-MW-05	NA	06/27/08		X				
ATL-GW-DUP	NA	06/27/08		X				Field duplicate of ATL-GW-MW-05
ATL-GW-MW-06	NA	06/27/08		X				

Table 2-1
Summary of Sample Analytical Program
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Sample Name	Depth (feet)	Sample Date	Arsenic and Lead Field Measurement	Laboratory Measurement				Comments
				Arsenic and Lead	pH	TAL Metals	TCLP Metals	
Surface Water								
ATL-SW-01	NA	09/29/06		X				
ATL-SW-02	NA	09/29/06		X				
ATL-SW-03	NA	09/29/06		X				
ATL-SW-DUP-01	NA	09/29/06		X				Field duplicate of ATL-SW-03
ATL-SW-04	NA	09/29/06		X				MS/MSD
Sediment								
ATL-SD-01	0-0.5	09/29/06		X				
ATL-SD-02	0-0.5	09/29/06		X				
ATL-SD-03	0-0.5	09/29/06		X				
ATL-SD-DUP-01	NA	09/29/06		X				Field duplicate of ATL-SD-03
ATL-SD-04	0-0.5	09/29/06		X				MS/MSD
Equipment Blanks								
ATL-QA-EB-092606	NA	09/26/06		X				Field Equipment Blank
ATL-QA-EB-092706	NA	09/27/06		X				Field Equipment Blank
ATL-QA-EB-092806	NA	09/28/06		X				Field Equipment Blank
ATL-QA-EB-092906	NA	09/29/06		X				Field Equipment Blank
ATL-QA-EB-100306	NA	10/03/06		X				Field Equipment Blank
ATL-QA-EB-101206	NA	10/12/06		X				Field Equipment Blank
ATL-QA-EB-111006	NA	11/10/06		X				Field Equipment Blank
ATL-EB-061008	NA	06/10/08		X				Field Equipment Blank
ATL-EB-061108	NA	06/11/08		X				Field Equipment Blank
ATL-EB-061208	NA	06/12/08		X				Field Equipment Blank
ATL-QA-EB-062708	NA	06/27/08		X				Field Equipment Blank
ATL-QA-EB-063008	NA	06/30/08		X				Field Equipment Blank
IDW								
ATL-IDW-01	NA	10/03/06					X	Investigative Derived Waste - Soil
ATL-IDW-02	NA	10/12/06		X	X			Investigative Derived Waste - Water
ATL-IDW-03	NA	11/10/06		X	X			Investigative Derived Waste - Water
ATL-IDW-061308	NA	06/13/08			X		X	Investigative Derived Waste - Soil
ATL-IDW-061308A	NA	06/13/08			X	X		Investigative Derived Waste - Water
ATL-IDW-04	NA	06/30/08		X	X			Investigative Derived Waste - Water

Notes:

1. Samples depths are measured in feet below ground surface.
2. Laboratory measurements were performed by TestAmerica, Inc. of Nashville, Tennessee.
3. Sample locations are shown on Figures 2-1 and 2-2.

MS/MSD - matrix spike/matrix spike duplicate.

NA - not applicable

Table 2-2
Groundwater Monitoring Well Specifications
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Monitoring Well ID	Installation Date	Measured Well Depth from TOPC (feet)	Surface Casing Length (feet)	Screen Length (feet)	Well Casing Diameter (inches)	Well Screen Slot Size (inches)	Elevation (feet)						Well Completion
							TOPC	Ground Surface	Top of Screen	Bottom of Screen	Coordinates		
											Northing	Easting	
ATL-MW-01	09/27/06	28.80	17.80	10	2	0.01	1010.90	1011.40	993.1	983.1	1367516.59	2246227.46	Flush mount
ATL-MW-02	09/28/06	29.37	18.57	10	2	0.01	1003.70	1004.00	985.1	975.1	1367577.74	2245735.40	Flush mount
ATL-MW-03	09/28/06	29.30	18.70	10	2	0.01	1023.60	1023.70	1004.9	994.9	1367918.15	2246782.14	Flush mount
ATL-MW-04	06/10/08	24.89	15.00	10	2	0.01	990.09	987.38	975.1	965.1	1367810.33	2245448.94	Stick Up
ATL-MW-05	06/12/08	27.93	17.50	10	2	0.01	985.71	982.73	968.2	958.2	1367368.93	2245427.79	Stick Up
ATL-MW-06	06/12/08	31.16	19.70	10	2	0.01	998.60	998.66	978.9	968.9	1367340.49	2245776.41	Flush mount

Notes:

TOPC - top of PVC casing

Groundwater elevations were surveyed based on National American Vertical Datum (NAVD 29).

Groundwater monitoring well locations were surveyed based on North American Datum (NAD 83).

Table 2-3
Groundwater Elevations
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Monitoring Well ID	Top of Casing (feet)	Ground Surface Elevation (feet)	Depth to Groundwater			Depth to Groundwater			Groundwater Elevation		
			10/11/06 (feet btoc)	11/09/06 (feet btoc)	06/27/08 (feet btoc)	10/11/06 (bgs)	11/09/06 (bgs)	06/27/08 (bgs)	10/11/06 (feet)	11/09/06 (feet)	06/27/08 (feet)
ATL-MW-01	1010.90	1011.40	20.99	21.19	23.59	21.49	21.69	24.09	989.91	989.71	987.31
ATL-MW-02	1003.70	1004.00	24.16	24.35	25.11	24.46	24.65	25.41	979.54	979.35	978.59
ATL-MW-03	1023.60	1023.70	20.11	20.51	24.42	20.21	20.61	24.52	1003.49	1003.09	999.18
ATL-MW-04	990.09	987.38	NA	NA	12.76	NA	NA	10.05	NA	NA	977.33
ATL-MW-05	985.71	982.73	NA	NA	18.41	NA	NA	15.43	NA	NA	967.30
ATL-MW-06	998.60	998.66	NA	NA	23.7	NA	NA	23.76	NA	NA	974.90

Notes:

bgs - below ground surface

btoc - below top of casing

Groundwater elevations were surveyed based on National American Vertical Datum (NAVD 29).

Groundwater monitoring well locations were surveyed based on North American Datum (NAD 83).

Table 2-4
Surface Water Elevations
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Stream Gauge ID	Top of Measuring Point (feet)	Depth to Surface Water			Surface Water Elevation		
		10/11/2006 (feet bmp)	11/09/2006 (feet bmp)	06/27/08 (feet bmp)	10/11/2006 (feet)	11/09/2006 (feet)	06/27/08 (feet)
SG-1	955.2	2.23	NA	NA	952.97	NA	NA
SG-2	961.9	2.47	3.7	2.52	959.43	958.20	959.38
SG-3	971.1	2.61	3.4	2.54	968.49	967.70	968.56
SG-4	963.0	2.89	NA	2.87	960.11	NA	960.13

Notes:

bmp - below measuring point

Stream gauge elevations were surveyed based on National American Vertical Datum (NAVD 29).

Stream gauge locations were surveyed based on North American Datum (NAD 83).

Table 3-1
Summary of Soil Sample Analytical Results from Residential/Recreational Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:							
			ATL-SB-001	ATL-SB-001	ATL-SB-002	ATL-SB-002	ATL-SB-003	ATL-SB-003	ATL-SB-004	ATL-SB-004
			0 - 0.5 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs
			9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/26/2006
Inorganics										
Arsenic	27	mg/kg	3.73	2.56	5	3.15	3.8	5.48	3.96	2.9
Lead	400	mg/kg	30.9	9.43	53.3	24.3	47.4	19.1	29	24.8
Miscellaneous										
pH	--	SU	7.4 J	6 J	8.3 J	8.2 J	6.4 J	6.4 J	5 J	5.8 J
% Dry Solids	--	%	80	80.9	82.2	75.8	86.4	75.2	81	86.1

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Table 3-1
Summary of Soil Sample Analytical Results from Residential/Recreational Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:							
			ATL-SB-005	ATL-SB-005	ATL-SB-005	ATL-SB-006	ATL-SB-006	ATL-SB-006	ATL-SB-007	ATL-SB-007
			0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs
			9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/26/2006
Inorganics										
Arsenic	27	mg/kg	8.53	15.2	3.22	11.7	5.72	1.26 U	2.28	1.12 U
Lead	400	mg/kg	82.3	185	22.8	372	38.5	6.52	15	8.23
Miscellaneous										
pH	- -	SU	6.3 J	6.9 J	5.8 J	5.5 J	5.8 J	5.1 J	5.4 J	4.9 J
% Dry Solids	- -	%	77.8	81.1	77.6	70.8	80	80	83.2	87.4

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Table 3-1
Summary of Soil Sample Analytical Results from Residential/Recreational Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:							
			ATL-SB-008	ATL-SB-008	ATL-SB-009	ATL-SB-009	ATL-SB-010	ATL-SB-010	ATL-SB-011	ATL-SB-011
			0 - 0.5 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs
			9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/26/2006
Inorganics										
Arsenic	27	mg/kg	1.4	9.39	5.52	2.85	5.26 J	7.03 J	3.66 J	3.31 J
Lead	400	mg/kg	32.1	29.9	20.5	15.1	55.6	26.3	35.8	15
Miscellaneous										
pH	- -	SU	6.3 J	6.6 J	6.7 J	7.2 J	6.2 J	5.7 J	7 J	6.4 J
% Dry Solids	- -	%	84.3	71	81.2	77.4	83.8	75.5	83.9	76.5

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Table 3-1
Summary of Soil Sample Analytical Results from Residential/Recreational Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:						
			ATL-SB-012	ATL-SB-012	ATL-SB-012-DUP	ATL-SB-013	ATL-SB-013	ATL-SB-013	ATL-SB-014
			0 - 0.5 ft bgs	0.5 - 2 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs
			9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/26/2006
Inorganics									
Arsenic	27	mg/kg	5.71 J	5.11 J	2.52 J	9.16 J	20.2 J	7.83 J	9.79 J
Lead	400	mg/kg	41.1	23.6	11.8	39	98.8	78	90.8
Miscellaneous									
pH	--	SU	5.4 J	6.9 J	7 J	6.4 J	6.1 J	6.8 J	5.4 J
% Dry Solids	--	%	83.1	83	81.9	87.8	86.5	71.3	84.8

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Table 3-1
Summary of Soil Sample Analytical Results from Residential/Recreational Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:							
			ATL-SB-014	ATL-SB-014	ATL-SB-034	ATL-SB-034	ATL-SB-034	ATL-SB-037	ATL-SB-037	ATL-SB-037
			0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs
			9/26/2006	9/26/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006
Inorganics										
Arsenic	27	mg/kg	4.52 J	3.45 J	4.01	2.19	5.2 J	5.26	3.19	3.13
Lead	400	mg/kg	58.7	23.1	23.9	21.3	15 J	56.2	27.8	12.4
Miscellaneous										
pH	--	SU	6.3 J	6 J	6.9 J	7 J	6 J	7.7 J	6.9 J	7.7 J
% Dry Solids	--	%	87.9	82.3	75.9	90.2	78.7	95.9	92.6	94.2

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Table 3-1
Summary of Soil Sample Analytical Results from Residential/Recreational Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:							
			ATL-SB-038	ATL-SB-038	ATL-SB-039	ATL-SB-039	ATL-SB-040	ATL-SB-040	ATL-SB-040	ATL-SB-045
			0 - 0.5 ft bgs	0.5 - 1.5 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs
			9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/28/2006
Inorganics										
Arsenic	27	mg/kg	5.35	4.53	5.41	5.07	4.61	8.3	5.48	4.26 J
Lead	400	mg/kg	53.6	75.7	78.6	12.9	57.5	67.2	132	25.5 J
Miscellaneous										
pH	--	SU	7.2 J	7.2 J	8.6 J	8.1 J	7.1 J	6.6 J	7 J	6.5 J
% Dry Solids	--	%	81.8	81.5	78	85.8	82.6	82.9	83.3	87.7

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Table 3-1
Summary of Soil Sample Analytical Results from Residential/Recreational Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:							
			ATL-SB-045	ATL-SB-045	ATL-SB-046	ATL-SB-046	ATL-SB-046	ATL-SB-047	ATL-SB-047	ATL-SB-047
			0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 3.5 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs
			9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006
Inorganics										
Arsenic	27	mg/kg	4.7 J	8.26 J	3.35 J	2.94 J	3.8 J	5.49	3.52	3.26
Lead	400	mg/kg	47.3 J	71.6 J	8.89 J	28.6 J	101 J	20.6	17.9	26.9
Miscellaneous										
pH	- -	SU	5.4 J	6.3 J	5.8 J	6.2 J	7 J	7.2 J	6.3 J	6.3 J
% Dry Solids	- -	%	82	81.4	94.2	82.2	82.4	83	80.9	80.1

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Table 3-1
Summary of Soil Sample Analytical Results from Residential/Recreational Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:							
			ATL-SB-048	ATL-SB-048	ATL-SB-048	ATL-SB-049	ATL-SB-049	ATL-SB-050	ATL-SB-050	ATL-SB-051
			0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 1.75 ft bgs	0 - 0.5 ft bgs
			9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	10/3/2006
Inorganics										
Arsenic	27	mg/kg	3.16	1.67	4.36	7.26	2.7	3.24 J	2.86 J	2.74
Lead	400	mg/kg	13.6	8.55	15	14.4	33.3	10.5 J	9.3 J	17.4
Miscellaneous										
pH	--	SU	7.2 J	7.3 J	6.3 J	5.9 J	6.2 J	6.8 J	7 J	7.2
% Dry Solids	--	%	90.8	90.6	83.2	78.6	81.9	88.4	95.4	92.9

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Table 3-1
Summary of Soil Sample Analytical Results from Residential/Recreational Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:						
			ATL-SB-051	ATL-SB-053	ATL-SB-053	ATL-SB-054	ATL-SB-054	ATL-SB-054-DUP	ATL-SB-056
			0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs
			10/3/2006	10/3/2006	10/3/2006	10/3/2006	10/3/2006	10/3/2006	10/3/2006
Inorganics									
Arsenic	27	mg/kg	4.42	3.34	4.13	2.78	1.85	1.42	1.53
Lead	400	mg/kg	27.8	20.2	24.1	9.8	29	23.7	12.7
Miscellaneous									
pH	- -	SU	7	7.2	8.2	6.8	7	6.1	7.1
% Dry Solids	- -	%	88.9	88.9	87.8	89.4	89	88	82.9

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Table 3-1
Summary of Soil Sample Analytical Results from Residential/Recreational Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:				
			ATL-SB-056	ATL-SB-057	ATL-SB-057	ATL-SB-058	ATL-SB-058
			0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs
			10/3/2006	10/3/2006	10/3/2006	10/3/2006	10/3/2006
Inorganics							
Arsenic	27	mg/kg	3.75	3.24	4.8	3.29	7.79
Lead	400	mg/kg	11.2	17.4	22.8	58.6	36.2
Miscellaneous							
pH	- -	SU	8	6.9	7.9	6.8	6.9
% Dry Solids	- -	%	82.9	86.1	74	87.2	84.9

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:						
			ATL-SB-015	ATL-SB-015	ATL-SB-015	ATL-SB-016	ATL-SB-016	ATL-SB-016-DUP	ATL-SB-016
			0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	0.5 - 2 ft bgs	2 - 2.5 ft bgs
			9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006
Inorganics									
Arsenic	27	mg/kg	10.3	5.75	5.7	3.53	3.15	2.98	3.28
Lead	800	mg/kg	80.5	19.6	18.1	35.2	35.2	34	70.1
Miscellaneous									
pH	- -	SU	7.5 J	6.1 J	5.3 J	6.5 J	5.5 J	5.4 J	5.9 J
% Dry Solids	- -	%	89	77.1	76.8	93.7	91.7	84.2	92.9

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels!

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:							
			ATL-SB-017	ATL-SB-017	ATL-SB-017	ATL-SB-018	ATL-SB-018	ATL-SB-019	ATL-SB-019	ATL-SB-020
			0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs
			9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006
Inorganics										
Arsenic	27	mg/kg	1.54	3.48	3.43	2.8	10.3	40.3	11.3	23.3 J
Lead	800	mg/kg	17.5	17.1	15.8	9	80.4	219	52.7	145
Miscellaneous										
pH	--	SU	6.3 J	5.2 J	5.1 J	6.4 J	7 J	6.7 J	7.4 J	6 J
% Dry Solids	--	%	94.2	77.8	74.7	92.1	86.2	76.3	72	83.2

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:						
			ATL-SB-020	ATL-SB-020	ATL-SB-021	ATL-SB-021	ATL-SB-021	ATL-SB-022	ATL-SB-022
			0.5 - 2 ft bgs	4 - 6 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs
			9/27/2006	6/11/2008	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006
Inorganics									
Arsenic	27	mg/kg	1260	4.42 J	43.7 J	46.2 J	46.3 J	13	9.61
Lead	800	mg/kg	2660	19.7 J	165	256	448	144	78.3
Miscellaneous									
pH	--	SU	5.7 J	4.7	7.1 J	6 J	5.8 J	5.8 J	6.3 J
% Dry Solids	--	%	85.2	82	74.8	76.2	76.9	76	84.6

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels.

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:							
			ATL-SB-023	ATL-SB-023	ATL-SB-023	ATL-SB-025	ATL-SB-025	ATL-SB-025	ATL-SB-026	ATL-SB-026
			0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs
			9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/28/2006	9/28/2006
Inorganics										
Arsenic	27	mg/kg	19.6 J	3.87 J	4.12 J	122	57.5	21	15.8	317
Lead	800	mg/kg	111	55.3	21.4	1000	955	98.3	99.2	1350
Miscellaneous										
pH	--	SU	6.3 J	5.9 J	7.1 J	6.3 J	5.7 J	6.3 J	6.2 J	6.1 J
% Dry Solids	--	%	82.8	89	87.5	78.1	77.6	72.2	80.8	89.8

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels.

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:						
			ATL-SB-026	ATL-SB-026	ATL-SB-027	ATL-SB-027	ATL-SB-027	ATL-SB-028	ATL-SB-028
			6 - 8 ft bgs	8 - 10 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	4 - 6 ft bgs	4 - 6 ft bgs	0.5 - 1 ft bgs
			9/28/2006	9/28/2006	9/27/2006	9/27/2006	6/12/2008	6/12/2008	9/27/2006
Inorganics									
Arsenic	27	mg/kg	6.97	1.99	25	28.5	4.71	7.22	229
Lead	800	mg/kg	18	20.8	297	225	34.3	8.88	213
Miscellaneous									
pH	--	SU	5.1 J	4.3 J	5.6 J	6.4 J	4	3.9	6.9 J
% Dry Solids	--	%	80.3	79.9	81.1	82.1	77.6	81.4	78.3

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:						
			ATL-SB-029	ATL-SB-029	ATL-SB-029	ATL-SB-030	ATL-SB-030	ATL-SB-031	ATL-SB-031-DUP
			0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0.5 - 2 ft bgs	0.5 - 2 ft bgs
			9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006
Inorganics									
Arsenic	27	mg/kg	37.4	5.85	2.25	7.52	1.62	4.4	4.43
Lead	800	mg/kg	271	23.6	18.6	491	19.8	25.6	33.2
Miscellaneous									
pH	--	SU	6.7 J	6.9 J	5.4 J	6.9 J	5.3 J	4.8 J	5.2 J
% Dry Solids	--	%	78.1	78.1	79.6	83.1	79.8	77	77.9

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels.

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:							
			ATL-SB-031	ATL-SB-032	ATL-SB-032	ATL-SB-033	ATL-SB-033	ATL-SB-033	ATL-SB-035	ATL-SB-035
			2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs
			9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/28/2006	9/28/2006
Inorganics										
Arsenic	27	mg/kg	4.06	7.36	7.57	1.64	18.9	10.9	3.7 J	4.65 J
Lead	800	mg/kg	23.4	63.3	81.8	8.95	164	91.6	9.2 J	9.82 J
Miscellaneous										
pH	--	SU	4.7 J	5.9 J	6.3 J	6.3 J	7.2 J	7.8 J	6.6 J	5.9 J
% Dry Solids	--	%	82.3	91.5	90	90.9	82.9	90.8	94	84.8

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels.

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:						
			ATL-SB-035-DUP	ATL-SB-035	ATL-SB-036	ATL-SB-036	ATL-SB-036	ATL-SB-041	ATL-SB-041-DUP
			0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0.5 - 2 ft bgs	0.5 - 2 ft bgs
			9/28/2006	9/28/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006
Inorganics									
Arsenic	27	mg/kg	3.67 J	5.14 J	22	45.6	7.51	2.47	4.34
Lead	800	mg/kg	8.94 J	7.73 J	344	1590	246	28.7	29.8 J
Miscellaneous									
pH	--	SU	5 J	5.8 J	5.6 J	5.3 J	5.5 J	4.6 J	4.6 J
% Dry Solids	--	%	85.9	86.8	72.2	80.5	77	76.3	76.6

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels.

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:						
			ATL-SB-041	ATL-SB-042	ATL-SB-042	ATL-SB-042	ATL-SB-042-DUP	ATL-SB-043	ATL-SB-043
			2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	2 - 4 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs
			9/27/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006
Inorganics									
Arsenic	27	mg/kg	2.32	2.24	1.14	10.2	5.07	2.02	1.37
Lead	800	mg/kg	32.4 J	22.6	13.1	47.3	28	9.24 J	10.9 J
Miscellaneous									
pH	--	SU	5.3 J	7.7 J	7.7 J	7.5 J	7.6 J	6.5 J	5.4 J
% Dry Solids	--	%	80.9	72.4	83.5	72	74.5	85.1	83.3

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels.

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:							
			ATL-SB-044	ATL-SB-044	ATL-SB-044	ATL-SB-052	ATL-SB-052	ATL-SB-059	ATL-SB-059	ATL-SB-060
			0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs
			9/27/2006	9/27/2006	9/27/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006
Inorganics										
Arsenic	27	mg/kg	4.23	8.33	4.08	4.3 J	4.19 J	5.32 J	7.59 J	9.04
Lead	800	mg/kg	74.4	135	17	36.7 J	38.9 J	21.4 J	31.5 J	147 J
Miscellaneous										
pH	--	SU	5.7 J	6.4 J	6.5 J	6 J	6.6 J	7.1 J	5.8 J	6.5 J
% Dry Solids	--	%	80.7	90.9	85.4	84.8	88.8	75.6	78	76

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:							
			ATL-SB-060	ATL-SB-061	ATL-SB-061	ATL-SB-061	ATL-SB-065	ATL-SB-065	ATL-SB-065	ATL-SB-065
			0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 3.5 ft bgs	4 - 6 ft bgs
			9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/27/2006	9/27/2006	9/27/2006	6/11/2008
Inorganics										
Arsenic	27	mg/kg	6.8	4.99 J	4.81 J	4.38 J	161	337	158	579 J
Lead	800	mg/kg	65.9 J	53.3 J	39 J	19.4 J	607	1520	527	2470 J
Miscellaneous										
pH	- -	SU	5.7 J	6.9 J	5.3 J	5.8 J	5.9 J	6.5 J	7.4 J	6 J
% Dry Solids	- -	%	73.1	79.7	87.4	86.7	82.3	87.1	87.7	69.3

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:						
			ATL-SB-065	ATL-SB-066	ATL-SB-066	ATL-SB-067	ATL-SB-067	ATL-SB-067	ATL-SB-068
			6 - 8 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs
			6/11/2008	6/10/2008	6/10/2008	6/10/2008	6/10/2008	6/10/2008	6/10/2008
Inorganics									
Arsenic	27	mg/kg	70 J	14.6 J	22.4 J	33.7 J	353 J	441 J	1.07 UJ
Lead	800	mg/kg	424 J	137	220	170	1120	1580	34
Miscellaneous									
pH	--	SU	4.7	6	6	6.3	5.9	5.6	5.2
% Dry Solids	--	%	83	94.7	78.2	90.6	89.5	86.9	82.8

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels.

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:						
			ATL-SB-068-DUP	ATL-SB-068	ATL-SB-068	ATL-SB-069	ATL-SB-069-DUP	ATL-SB-069	ATL-SB-069
			0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs
			6/10/2008	6/10/2008	6/10/2008	6/10/2008	6/10/2008	6/10/2008	6/10/2008
Inorganics									
Arsenic	27	mg/kg	8.71 J	3.94 J	1.13 UJ	77.6	88.4	51.7	25.3
Lead	800	mg/kg	69.9 J	55.4	22.3	401	432 J	363	66.1
Miscellaneous									
pH	--	SU	5.4 J	4.8	4.6	5.5	6.3 J	6.9	7.3
% Dry Solids	--	%	84.6	81.1	78.4	88.2	86.9	90.9	86.6

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels.

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:							
			ATL-SB-070	ATL-SB-070	ATL-SB-070	ATL-SB-071	ATL-SB-071	ATL-SB-071	ATL-SB-072	ATL-SB-072
			0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs
			6/10/2008	6/10/2008	6/10/2008	6/10/2008	6/10/2008	6/10/2008	6/10/2008	6/10/2008
Inorganics										
Arsenic	27	mg/kg	28.4 J	164 J	1.04 UJ	5.61 J	1.07 UJ	1.1 UJ	41.1 J	33.9 J
Lead	800	mg/kg	221	503	25.6	83.7	12.6	12.8	173	177
Miscellaneous										
pH	--	SU	6.7	6.8	7	4.9	5.1	4.9	5.6	6
% Dry Solids	--	%	83.5	90.6	85	81.5	80.2	79.3	88.9	88.9

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels.

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:						
			ATL-SB-072	ATL-SB-072	ATL-SB-073	ATL-SB-073-DUP	ATL-SB-073	ATL-SB-073	ATL-SB-073
			2 - 4 ft bgs	4 - 6 ft bgs	0 - 0.5 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	4 - 6 ft bgs
			6/10/2008	6/10/2008	6/11/2008	6/11/2008	6/11/2008	6/11/2008	6/11/2008
Inorganics									
Arsenic	27	mg/kg	33.2	8.47	60.1 J	117 J	241 J	516 J	84.5 J
Lead	800	mg/kg	122	46.3	352 J	328	920 J	1070 J	205 J
Miscellaneous									
pH	--	SU	6.3	5.7	5.4	5.9 J	6.8	6.3	5.3
% Dry Solids	--	%	86.3	99.8	92.1	92.1	90.2	89.9	90.7

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:						
			ATL-SB-073	ATL-SB-074	ATL-SB-074	ATL-SB-074	ATL-SB-075	ATL-SB-075-DUP	ATL-SB-075
			6 - 8 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs
			6/11/2008	6/11/2008	6/11/2008	6/11/2008	6/12/2008	6/12/2008	6/12/2008
Inorganics									
Arsenic	27	mg/kg	49.6 J	9.56 J	21.6 J	3.08 J	5.4	6.18	5.29
Lead	800	mg/kg	133 J	78.4	95.1	32.1	25.8	31.1	33.2
Miscellaneous									
pH	--	SU	5.1	6.7 J	7.8 J	6 J	85.2	83.5	79.8
% Dry Solids	--	%	86.7	93.8	89.7	81.9	6	4	6.9

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels.

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:					
			ATL-SB-075	ATL-SB-075	ATL-SB-076	ATL-SB-076	ATL-SB-076	ATL-SB-077
			2 - 4 ft bgs	4 - 6 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs
			6/12/2008	6/12/2008	6/12/2008	6/12/2008	6/12/2008	6/10/2008
Inorganics								
Arsenic	27	mg/kg	4.95	4.45	59.7	49.4	5.78	120
Lead	800	mg/kg	19.8	29.3	98.4	144	28.5	211
Miscellaneous								
pH	- -	SU	79	87.2	84	87.2	85.4	88
% Dry Solids	- -	%	5.5	4	5.1	6.2	4.4	5.8

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels!

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:							
			ATL-SB-077	ATL-SB-077	ATL-SB-078	ATL-SB-078	ATL-SB-078	ATL-SB-078	ATL-SB-079	ATL-SB-079
			2 - 4 ft bgs	4 - 6 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	4 - 6 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs
			6/10/2008	6/10/2008	6/10/2008	6/10/2008	6/10/2008	6/10/2008	6/11/2008	6/11/2008
Inorganics										
Arsenic	27	mg/kg	34.4	36.2 J	2.51	5.53	64.9	531	26.1 J	13.1 J
Lead	800	mg/kg	196	112	60.7	97.4	269	1480	95.1	51.7
Miscellaneous										
pH	--	SU	87.4	86.7	89.3	86	87.4	89.4	90.4	90.4
% Dry Solids	--	%	5.9	6.2	5.2	5.6	5.3	5.6	5.9 J	5.9 J

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels.

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:						
			ATL-SB-079	ATL-SB-080	ATL-SB-080	ATL-SB-080	ATL-SB-081	ATL-SB-081	ATL-SB-081
			2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs
			6/11/2008	6/12/2008	6/12/2008	6/12/2008	6/12/2008	6/12/2008	6/12/2008
Inorganics									
Arsenic	27	mg/kg	42.9 U	12.9	1.85 U	1.12 U	10.7	13.2	2.1 U
Lead	800	mg/kg	178	67.4	31.3	19.7	270	400	43.3
Miscellaneous									
pH	--	SU	84	82.4	85.9	79.2	83.1	85.4	78.4
% Dry Solids	--	%	6.3 U	6.1	6.8	7.3	5.5	5.7	5.7

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:						
			ATL-SB-082	ATL-SB-082	ATL-SB-082	ATL-SB-083	ATL-SB-083	ATL-SB-083	ATL-SB-084
			0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs
			6/12/2008	6/12/2008	6/12/2008	6/12/2008	6/12/2008	6/12/2008	6/12/2008
Inorganics									
Arsenic	27	mg/kg	190	150	72.9	3.32	17	4.62	6.62
Lead	800	mg/kg	1300	1250	452	57.9	208	49.9	89.7
Miscellaneous									
pH	--	SU	80.1	79.3	77.6	91.2	87.7	80.5	88.1
% Dry Solids	--	%	5.1	7.2	7	3.9	4	3.9	8.1

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels.

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:					
			ATL-SB-084	ATL-SB-084	ATL-SB-085	ATL-SB-085	ATL-SB-085	ATL-SB-086
			0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs
			6/12/2008	6/12/2008	6/12/2008	6/12/2008	6/12/2008	6/12/2008
Inorganics								
Arsenic	27	mg/kg	5.19	3.18	9.29	7.87	3.51	3.54
Lead	800	mg/kg	26.9	25.5	50	89.7	28.2	50.9
Miscellaneous								
pH	--	SU	77.2	78	87.5	79.2	78.4	79.1
% Dry Solids	--	%	6.3	4.5	7.3	8	7.8	4.6

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:						
			ATL-SB-086	ATL-SB-087	ATL-SB-087-DUP	ATL-SB-087	ATL-SB-087	ATL-SB-088	ATL-SB-088
			2 - 4 ft bgs	0 - 0.5 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs
			6/12/2008	6/12/2008	6/12/2008	6/12/2008	6/12/2008	6/12/2008	6/12/2008
Inorganics									
Arsenic	27	mg/kg	1.03 U	6.09	3.89	5.72	6.55	5	4.44
Lead	800	mg/kg	17.9	70.9	49.4	192	140	19.5	23.7
Miscellaneous									
pH	--	SU	84.8	79.5	73.9	81.2	91.4	82.4	82.2
% Dry Solids	--	%	4.3	4.3	4.5	4.2	4.1	5.8	6.1

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:						
			ATL-SB-088	ATL-SBMW-4	ATL-SBMW-4	ATL-SBMW-4	ATL-SBMW-5	ATL-SBMW-5	ATL-SBMW-5
			2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs	0 - 0.5 ft bgs	0.5 - 2 ft bgs	2 - 4 ft bgs
			6/12/2008	6/10/2008	6/10/2008	6/10/2008	6/10/2008	6/10/2008	6/10/2008
Inorganics									
Arsenic	27	mg/kg	5.49	1.13 U	1.18 U	1.03 U	40.9	62.2	147
Lead	800	mg/kg	31	18.3	13.5	16.7	168	214	182
Miscellaneous									
pH	--	SU	86.9	80.3	77	87.2	91.1	67.7	68.9
% Dry Solids	--	%	6.3	5.1 J	4.4 J	4.3 J	6 J	6.2 J	6.7 J

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels.

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:						
			ATL-SBMW-5	ATL-SBMW-5	ATL-SBMW-5	ATL-SBMW-5	ATL-SBMW-5	ATL-SBMW-6	ATL-SBMW-6
			4 - 6 ft bgs 6/10/2008	6 - 8 ft bgs 6/10/2008	8 - 10 ft bgs 6/10/2008	10 - 12 ft bgs 6/10/2008	12 - 14 ft bgs 6/10/2008	0 - 0.5 ft bgs 6/11/2008	0.5 - 2 ft bgs 6/11/2008
Inorganics									
Arsenic	27	mg/kg	1.13 U	131	283	159	5.6	24.8	392
Lead	800	mg/kg	38	302	128 J	511 J	23.8 J	227 J	170 J
Miscellaneous									
pH	--	SU	77.2	79.3	74.8	70.2	87.9	92	86.7
% Dry Solids	--	%	6.2 J	5.6 J	5.8 J	6 J	6.3 J	7.2 J	5.3 J

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels

Table 3-2
Summary of Soil Sample Analytical Results from Commercial Properties
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:		
			ATL-SBMW-6	ATL-SBMW-6	ATL-SBMW-6
			2 - 4 ft bgs	4 - 6 ft bgs	6 - 8 ft bgs
			6/11/2008	6/11/2008	6/11/2008
Inorganics					
Arsenic	27	mg/kg	334	583	1.13 U
Lead	800	mg/kg	679 J	139 J	39.2
Miscellaneous					
pH	--	SU	90.6	83	77.3
% Dry Solids	--	%	5.5 J	5.3 J	4 J

Notes:

J - estimated value

U - not detected

SU - standard units

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Shaded values exceed screening levels

Table 3-3
Summary of Groundwater Sample Analytical Results
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Levels	Units	Concentration in Sample:				
			ATL-GW-MW-01	ATL-GW-MW-01	ATL-GW-MW-01	ATL-GW-MW-02	ATL-GW-MW-02-DUP
			10/11/2006	11/9/2006	6/30/2008	10/12/2006	10/12/2006
Inorganics							
Arsenic	10	ug/L	10 U	10 U	5 U	21.2	20
Lead	15	ug/L	2.4 J	5 U	2.5 U	26.6	22.3
Field Parameters							
Dissolved Oxygen	--	mg/L	8.79	6.04	3.26	8.65	NA
ORP	--	mV	477	434	209	385	NA
pH	--	SU	4.25	3.89	5.79	3.73	NA
Specific Conductance	--	mS/cm	0.372	0.348	0.265	1.92	NA
Temperature	--	°C	28.51	24.01	25.57	23.31	NA
Turbidity	--	NTU	83.9	354	8.9	137	NA

Notes:

J - estimated value

U - not detected

mg/L - milligrams per liter

mV - millivolt

SU - standard units

mS/cm - millisiemens per centimeter

°C - degrees Celcius

NTU - nephelometric turbidity units

Shaded values exceed screening levels.

Table 3-3
Summary of Groundwater Sample Analytical Results
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Levels	Units	Concentration in Sample:				
			ATL-GW-MW-02	ATL-GW-MW-02-DUP	ATL-GW-MW-02	ATL-GW-MW-03	ATL-GW-MW-03
			11/10/2006	11/10/2006	6/27/2008	10/12/2006	11/10/2006
Inorganics							
Arsenic	10	ug/L	24.6	22.8	5 U	10 U	10 U
Lead	15	ug/L	51.2	48.4	10.8	5.3	3 J
Field Parameters							
Dissolved Oxygen	--	mg/L	3.49	NA	0.99	0.9	2.78
ORP	--	mV	416	NA	443	-77	100
pH	--	SU	3.55	NA	4.47	5.89	5.73
Specific Conductance	--	mS/cm	1.84	NA	1.21	0.319	0.271
Temperature	--	°C	23.25	NA	22.9	21.68	22.21
Turbidity	--	NTU	67.7	NA	8.3	145	125

Notes:

J - estimated value

U - not detected

mg/L - milligrams per liter

mV - millivolt

SU - standard units

mS/cm - millisiemens per centimeter

°C - degrees Celcius

NTU - nephelometric turbidity units

Shaded values exceed screening levels.

Table 3-3
Summary of Groundwater Sample Analytical Results
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Levels	Units	Concentration in Sample:				
			ATL-GW-MW-03	ATL-GW-MW-04	ATL-GW-MW-05	ATL-GW-MW-05-DUP	ATL-GW-MW-06
			6/30/2008	6/27/2008	6/27/2008	6/27/2008	6/27/2008
Inorganics							
Arsenic	10	ug/L	5 U	5 U	8.4 J	9 J	5 U
Lead	15	ug/L	2.5 U	2.5 U	3.4 J	2.5 U	2.5 U
Field Parameters							
Dissolved Oxygen	--	mg/L	0.32	2.08	0.05	NA	3.01
ORP	--	mV	153	185	480	NA	189
pH	--	SU	6.35	6.38	4.81	NA	6.65
Specific Conductance	--	mS/cm	0.237	0.113	0.459	NA	0.45
Temperature	--	°C	22.39	18.45	18.09	NA	21.32
Turbidity	--	NTU	6	0.3	3	NA	1.5

Notes:

J - estimated value

U - not detected

mg/L - milligrams per liter

mV - millivolt

SU - standard units

mS/cm - millisiemens per centimeter

°C - degrees Celcius

NTU - nephelometric turbidity units

Shaded values exceed screening levels.

Table 3-4
Summary of Surface Water Sample Analytical Results
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:				
			ATL-SW-01	ATL-SW-02	ATL-SW-03	ATL-SW-03-DUP	ATL-SW-04
			9/29/2006	9/29/2006	9/29/2006	9/29/2006	9/29/2006
Inorganics							
Arsenic	10	ug/L	4.8 U	8.5 J	4.8 U	4.8 U	4.8 U
Lead	15	ug/L	2.2 U	4.3 J	2.2 U	2.2 U	2.2 U
Field Parameters							
Dissolved Oxygen	--	mg/L	8.52	7.42	8.3	NA	7.86
ORP	--	mV	310	252	165	NA	1.9
pH	--	SU	6.48	6.33	6.77	NA	6.69
Specific Conductance	--	mS/cm	0.311	0.384	0.245	NA	0.132
Temperature	--	°C	15.86	16.41	15.58	NA	17.21
Turbidity	--	NTU	3.2	3.3	2.7	NA	2.3

Notes:

J - estimated value

U - not detected

mg/L - milligrams per liter

mV - millivolt

SU - standard units

mS/cm - millisiemens per centimeter

NTU - nephelometric turbidity units

Table 3-5
Summary of Sediment Sample Analytical Results
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Screening Level	Units	Concentration in Sample:				
			ATL-SD-01	ATL-SD-02	ATL-SD-03	ATL-SD-03-DUP	ATL-SD-04
			0-0.5 ft bgs	0-0.5 ft bgs	0-0.5 ft bgs	0-0.5 ft bgs	0-0.5 ft bgs
			9/29/2006	9/29/2006	9/29/2006	9/29/2006	9/29/2006
Inorganics							
Arsenic	27	mg/kg	3.75	10.4	1.15 U	1.79	2.74
Lead	400	mg/kg	28.3 J	83.4 J	6.72 J	7.17 J	33 J

Notes:

J - estimated value

U - not detected

mg/kg - milligrams per kilogram

ft bgs - feet below ground surface

Table 3-6
Summary of Waste Characterization Sample Analytical Results
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Regulatory Level	Units	Concentration in Sample:							
			ATL-SB-67	ATL-SB-69	ATL-SB-73	ATL-SB-82	ATL-SBMW-5	ATL-SBMW-5	ATL-SBMW-6	
			0 - 4 ft bgs	0 - 2 ft bgs	0 - 6 ft bgs	0 - 4 ft bgs	0 - 4 ft bgs	6 - 12 ft bgs	0.5 - 6 ft bgs	
			6/10/2008	6/10/2008	6/11/2008	6/10/2008	6/10/2008	6/10/2008	6/11/2008	
Inorganics										
Arsenic	27	mg/kg	170	89.6	220	109	70.9	152	98.8	
Lead	400	mg/kg	637	421	591	590	168	263	261	
TCLP - Metals										
Arsenic	5	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Barium	100	mg/L	0.552	0.414	0.481	0.177	0.438	0.231	0.17	
Cadmium	1	mg/L	0.008 U	0.01	0.008 U	0.009 J	0.008 J	0.009 J	0.008 J	
Chromium	5	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	
Lead	5	mg/L	0.526	0.0753	0.437	0.594	0.0746	1.36	0.0857	
Mercury	0.2	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Selenium	1	mg/L	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	
Silver	5	mg/L	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	
Miscellaneous										
pH	< 2	SU	7 J	7.5 J	6.7 J	6.8 J	5.8 J	5.8 J	5.2 J	

Notes:

J - estimated value

U - not detected

SU - standard units

mg/L - milligrams per liter

Table 3-7
Summary of Investigative-Derived Waste Sample Analytical Results
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Regulatory Level	Units	Concentration in Sample:					
			ATL-IDW-01 10/3/2006	ATL-IDW-02 10/12/2006	ATL-IDW03 11/10/2006	ATL-IDW04 6/30/2008	ATL-IDW-061308 6/13/2008	ATL-IDW-061308A 6/13/2008
TCLP - Metals								
Aluminum	--	mg/L	NA	NA	NA	NA	NA	97.9
Antimony	--	mg/L	NA	NA	NA	NA	NA	0.07 U
Arsenic	5	mg/L	0.041 J	0.01 U	0.01 U	0.005 U	0.05 U	0.241
Barium	100	mg/L	0.619	NA	NA	NA	0.313	0.336
Beryllium	--	mg/L	NA	NA	NA	NA	NA	0.02 U
Cadmium	1	mg/L	0.002 J	NA	NA	NA	0.008 U	0.008 U
Calcium	--	mg/L	NA	NA	NA	NA	NA	18
Chromium	5	mg/L	0.114	NA	NA	NA	0.02 U	0.16
Cobalt	--	mg/L	NA	NA	NA	NA	NA	0.076 J
Copper	--	mg/L	NA	NA	NA	NA	NA	0.401
Iron	--	mg/L	NA	NA	NA	NA	NA	165
Lead	5	mg/L	0.07	0.0693	0.0191	0.0053	0.056	1.24
Magnesium	--	mg/L	NA	NA	NA	NA	NA	5.57 J
Manganese	--	mg/L	NA	NA	NA	NA	NA	1.16
Mercury	0.2	mg/L	0.005 U	NA	NA	NA	0.005 U	0.00264 J
Nickel	--	mg/L	NA	NA	NA	NA	NA	0.067 J
Potassium	--	mg/L	NA	NA	NA	NA	NA	17.6
Selenium	1	mg/L	0.05 J	NA	NA	NA	0.095 U	0.095 U
Silver	5	mg/L	0.0019 U	NA	NA	NA	0.03 U	0.03 U
Sodium	--	mg/L	NA	NA	NA	NA	NA	3950
Thallium	--	mg/L	NA	NA	NA	NA	NA	0.1
Vanadium	--	mg/L	NA	NA	NA	NA	NA	0.376
Zinc	--	mg/L	NA	NA	NA	NA	NA	1.68
Miscellaneous								
pH	--	SU	NA	2.5	6.7	NA	7.8	7.2

Notes:

J - estimated value

mg/L - milligrams per liter

SU - standard units

U - not detected

NA - not analyzed

Table 3-8
Summary of Field Quality Control Sampling Results
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Units	Concentration in Sample:				
		ATL-QA-EB-092606	ATL-QA-EB-092606	ATL-QA-EB-092806	ATL-QA-EB-092906	ATL-QA-EB-100-06
		9/26/2006	9/27/2006	9/28/2006	9/29/2006	10/3/2006
Inorganics						
Arsenic	mg/L	0.0073 J	0.005 J	0.01 U	0.0048 U	0.0048 U
Lead	mg/L	0.005 U	0.005 U	0.005 U	0.0022 U	0.0022 U

Notes:

J - estimated value

U - not detected

mg/L - milligrams per liter

Table 3-8
Summary of Field Quality Control Sampling Results
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Units	Concentration in Sample:				
		ATL-QA-EB-101206	ATL-QA-EB-111006	ATL-EB061008	ATL-EB061108	ATL-EB061208
		10/12/2006	11/10/2006	6/10/2008	6/11/2008	6/12/2008
Inorganics						
Arsenic	mg/L	0.01 U	0.01 U	0.005 U	0.005 U	0.005 U
Lead	mg/L	0.005 U	0.005 U	0.0025 U	0.0768	0.0025 U

Notes:

J - estimated value

U - not detected

mg/L - milligrams per liter

Table 3-8
Summary of Field Quality Control Sampling Results
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Analyte	Units	Concentration in Sample:	
		ATL-QA-EB-062708	ATL-QA-EB-063008
		6/27/2008	6/30/2008
Inorganics			
Arsenic	mg/L	0.005 U	0.005 U
Lead	mg/L	0.0025 U	0.0025 U

Notes:

J - estimated value

U - not detected

mg/L - milligrams per liter

Table 4-1
Summary of Removal Action
Site Delineation Report and Removal Action Work Plan
VCC - Atlanta, DeKalb County, Georgia

Installation of an Asphalt Cap

Area	Approximate Area (acres)
1	3.2
2	1.2
3	0.35
Total	4.8

Soil Excavation and Offsite Disposal

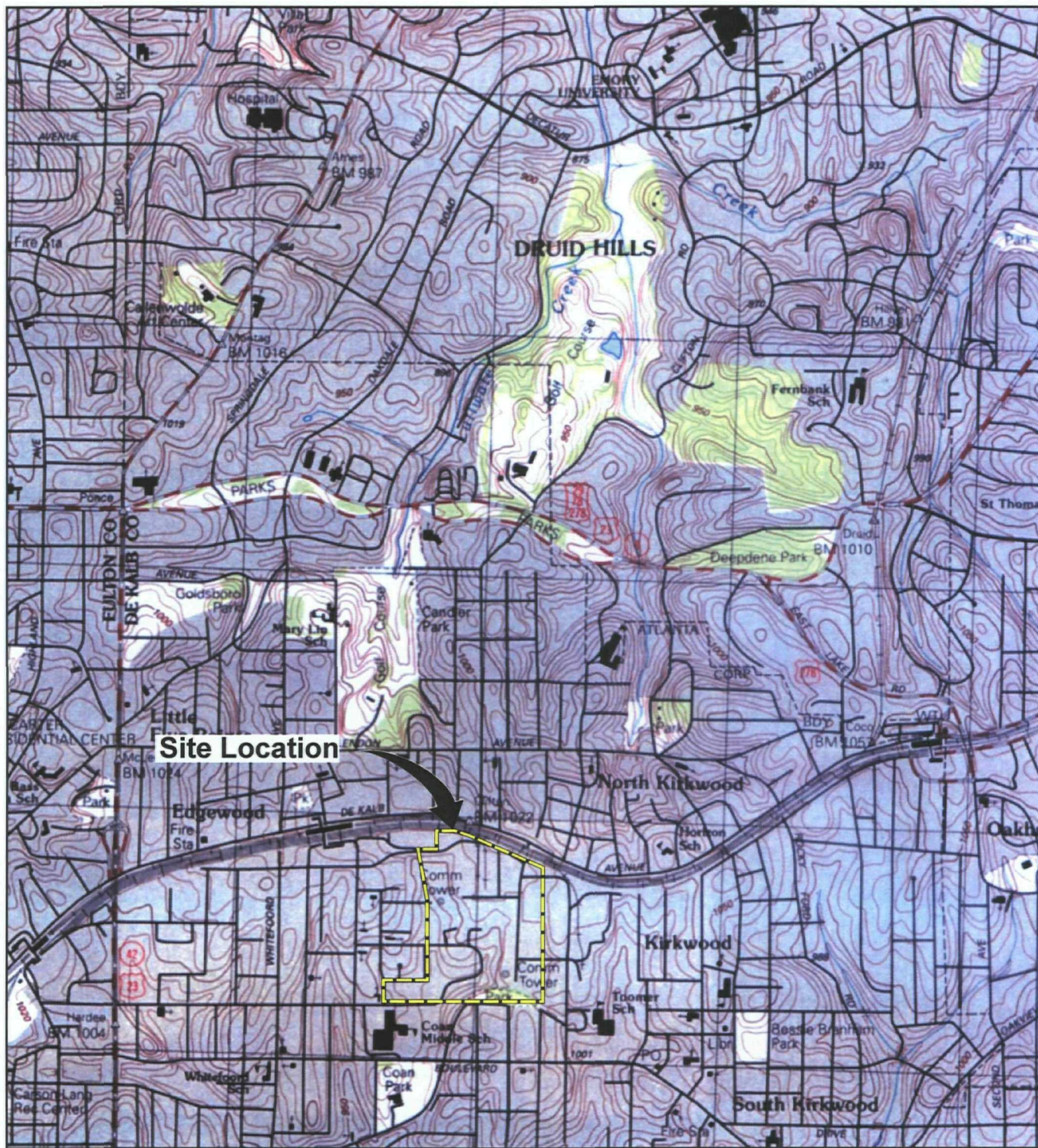
Area	Approximate Area (acres)	Planned Removal Depth (feet)	Estimated Soil Excavation Volume (cy)
4	0.20	2	645
	0.20	2	645
5	0.10	2	323
6	0.35	2	1,129
7	TBD	TBD	TBD
Total	0.85	2	2,743

Notes:

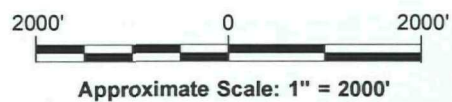
TBD = To be determined.

ARCADIS

Figures



REFERENCE: Base Map USGS 7.5 Min. Quad., Northeast Atlanta, Georgia, 1993.



Area Location

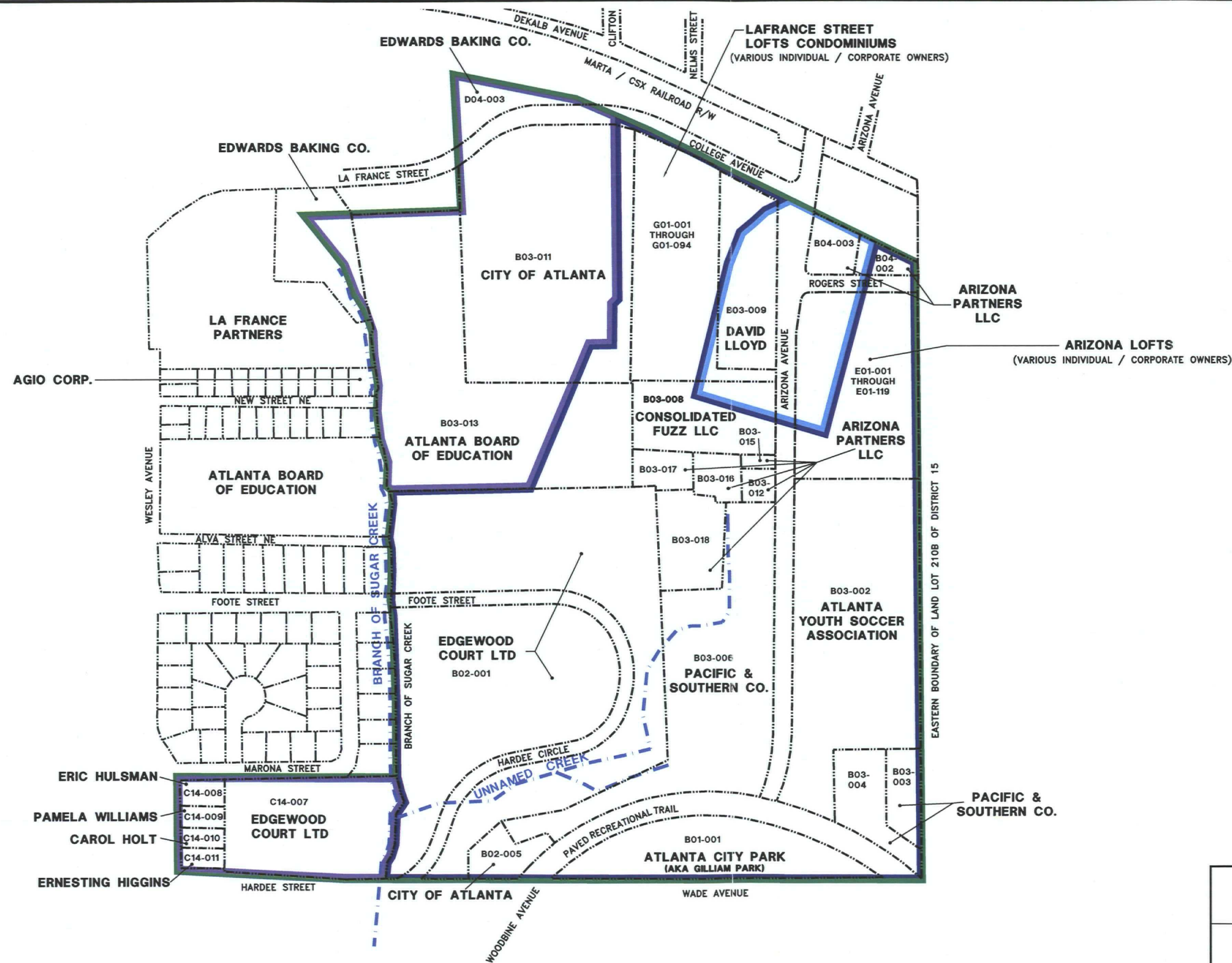
EXXONMOBIL
ATLANTA, DEKALB COUNTY, GEORGIA
SITE DELINEATION REPORT AND REMOVAL
ACTION WORK PLAN

SITE LOCATION MAP



FIGURE
1-1

CITY/CARY DIV/GR/35 LD LEE LYRON+OFF+REF+
O:\ENVCAD\Cary\ACT\B008725001\000500\MAP\REPORT\SDRR\WP8572501.dwg LAYOUT: 1-2 SAVED: 2/10/2009 10:15 AM ACADVER: 17.15 (LMS TECH) PAGES: 1-2 PLOTTED: 2/10/2009 11:22 AM BY: ELLIS, LEKOREY
XREFS: IMAGES: PROJECTNAME: 8572501



EXXONMOBIL
ATLANTA, DEKALB COUNTY, GEORGIA
**SITE DELINEATION REPORT AND REMOVAL
ACTION WORK PLAN**
**BASE MAP OF SITE SHOWING FORMER
VCC PROPERTY BOUNDARIES
WITH CURRENT TAX PARCEL DATA**



FIGURE
1-2

CITY: CARY DIV: G 85 LD: LEE LYRONA: OFF: REF: G:\ENV\CAD\Cary\ACT\0005725\0001\00005\MAP\REPORTS\DRAMP\85725801.dwg LAYOUT: 1-3 SAVED: 2/10/2009 10:15 AM ACADVER: 17.1 S (LMS TECH) PAGES: 1-3 PLOTTED: 2/10/2009 10:47 AM BY: ELLIS, LEKOREY XREFS: 85725XDL IMAGES: 85725X01.jpg PROJECTNAME: —

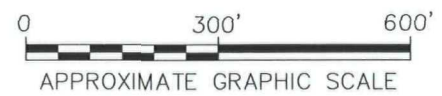


- LEGEND:
- PROBABLE BOUNDARIES OF FORMER VIRGINIA CAROLINA CHEMICAL CORPORATION PROPERTY
 - APPROXIMATE LOCATION OF CURRENT PROPERTY LINES
 - PROBABLE LOCATION OF FORMER FERTILIZER FACILITY FEATURE
 - PROBABLE LOCATION OF FORMER RAILROAD SPUR
 - APPROXIMATE LOCATION OF SURFACE WATER FEATURE

- HISTORICAL VIRGINIA-CAROLINA CHEMICAL CORPORATION FERTILIZER MANUFACTURING STRUCTURES:
- 1 MAIN FERTILIZER BUILDING
 - 2 ACID CHAMBERS
 - 3 COAL, PHOSPHATE, SULFUR, AND PYRITES STORAGE
 - 4 BURNER HOUSE
 - 5 COAL PILE
 - 6 RESERVOIR AND/OR WELL
 - 7 UNIDENTIFIED FURNACE ASSOCIATED WITH THE FORMER CLIFTON CHEMICAL AND PHOSPHATE CO.

- NOTES:
- 1. FORMER PROPERTY BOUNDARY BASED ON HISTORICAL DEEDS AND 1902 PLAT MAP.
 - 2. PARCEL BOUNDARIES DIGITIZED FROM 2004 DEKALB COUNTY TAX MAP.
 - 3. 2008 AERIAL PROVIDED BY TELE ATLAS AND ACICOM.
 - 4. ALL LOCATIONS ARE APPROXIMATE.
 - 5. HISTORICAL SITE FEATURES BASED ON HISTORICAL MAPS.

- CURRENT PROPERTY USE " # "
- 1 EDWARDS BAKING COMPANY
 - 2 ATLANTA PUBLIC SCHOOLS SERVICE CENTER
 - 3 UNIDENTIFIED PROCESS/STORAGE AREA (POSSIBLE INDUSTRIAL WASTEWATER TREATMENT FACILITY)
 - 4 CARLYE PARK TOWNHOMES
 - 5 COMMUNICATION TOWER (FORMER LOCATION OF WESLEY PARK)
 - 6 FORMER RAGSDALE ELEMENTARY SCHOOL
 - 7 LAFRANCE STREET LOFTS CONDOMINIUMS (FORMER ZUBER LUMBER CO. AND FARMER CO. COAL YARD)
 - 8 EDGEWOOD COURT APARTMENTS
 - 9 CHURCH
 - 10 CLOTHING WAREHOUSE (FORMER LOCATION OF FOUNDRY)
 - 11 PARKING FOR ARIZONA LOFTS
 - 12 ARIZONA LOFTS (FORMER TIRE WAREHOUSE)
 - 13 LOFT / CONDOMINIUMS (206 ROGERS STREET)
 - 14 DPC ENVIRONMENTAL CONTRACTING
 - 15 FORMER OIL DEPOT OFFICE
 - 16 OFFICE
 - 17 200 ARIZONA AVE. COMMERCIAL BUILDING (FORMERLY USED FOR TRUCK TRAILER MANUFACTURING)
 - 18 SWIMMING POOL AND PARKING FOR ARIZONA LOFTS
 - 19 SOCCER FIELD CURRENTLY UNDER CONSTRUCTION BY ATLANTA YOUTH SOCCER ASSOCIATION (FORMER MOTOR FREIGHT STATION AND SHOP)
 - 20 SAMMYE E. COAN MIDDLE SCHOOL
 - 21 GILLIAM PARK
 - 22 COMMUNICATION TOWER
 - 23 FRED TOOMER ELEMENTARY SCHOOL



EXXONMOBIL
ATLANTA, DEKALB COUNTY, GEORGIA
**SITE DELINEATION REPORT AND REMOVAL
ACTION WORK PLAN**

**SITE MAP SHOWING HISTORICAL AND
CURRENT SITE FEATURES**

ARCADIS

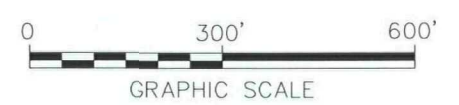
FIGURE
1-3

CITY: GARY DIV: GROUP: 85 LD: LEE LVR: ON-OFF: REF: G:\ENVCAD\city\act\B0005725000100005MAP\REPORT\SDRR\AWP\85725008.dwg LAYOUT: 2-1 SAVED: 2/10/2009 10:19 AM ACADVER: 17.15 LMS TECH PAGESETUP: — PLOTSTYLETABLE: PLT\Full.ctb PLOTTED: 2/10/2009 10:51 AM BY: ELLIS, LEROY KREFS: 85725XDL 85725X01.jpg PROJECTNAME: —



- LEGEND:
- PROBABLE BOUNDARIES OF FORMER VIRGINIA CAROLINA CHEMICAL CORPORATION PROPERTY
 - APPROXIMATE LOCATION OF CURRENT PROPERTY LINES
 - APPROXIMATE LOCATION OF SURFACE WATER FEATURE
 - 038 ▲ SOIL BORING AND SAMPLE LOCATION
 - ACCESS NOT GRANTED
 - SOIL BORING LOCATION ANALYZED FOR TCLP

- NOTES:
1. FORMER PROPERTY BOUNDARY BASED ON HISTORICAL DEEDS AND 1902 PLAT MAP.
 2. PARCEL BOUNDARIES DIGITIZED FROM 2004 DEKALB COUNTY TAX MAP.
 3. 2008 AERIAL PROVIDED BY TELE ATLAS AND ACXICOM.
 4. ALL LOCATIONS ARE APPROXIMATE.
 5. SOIL BORINGS PREFIXES BEGIN WITH "ATL-SB-".



EXXONMOBIL
ATLANTA, DEKALB COUNTY, GEORGIA
**SITE DELINEATION REPORT AND REMOVAL
ACTION WORK PLAN**

LOCATIONS OF SOIL SAMPLES

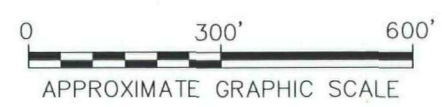
FIGURE
2-1

CITY: CARY DIV: GROUP: 85 LD: LEE LYRON: OFF: REF: G:\ENVCAD\Cary\ACT\B0805725000100005\MAP\REPORT\SDRRAMP\85725B02.dwg LAYOUT: 2-2 SAVED: 2/10/2009 10:22 AM ACADVER: 17.1S (LMS TECH) PAGES: 22 PLOT: 2/10/2009 10:48 AM BY: ELLIS, LEKOREY
XREFS: 85725X01 85725X01
IMAGES: PROJECTNAME: -



- LEGEND:
- PROBABLE BOUNDARIES OF FORMER VIRGINIA CAROLINA CHEMICAL CORPORATION PROPERTY
 - APPROXIMATE LOCATION OF CURRENT PROPERTY LINES
 - APPROXIMATE LOCATION OF SURFACE WATER FEATURE
 - MONITORING WELL LOCATION
 - STREAM GAUGE LOCATION
 - SURFACE WATER SAMPLE LOCATION
 - SEDIMENT SAMPLE LOCATION

- NOTES:
1. FORMER PROPERTY BOUNDARY BASED ON HISTORICAL DEEDS AND 1902 PLAT MAP.
 2. PARCEL BOUNDARIES DIGITIZED FROM 2004 DEKALB COUNTY TAX MAP.
 3. 2008 AERIAL PROVIDED BY TELE ATLAS AND ACXICOM.
 4. MONITORING WELL, STREAM GAUGE, SURFACE WATER, AND SEDIMENT SAMPLE PREFIXES BEGIN WITH "ATL-".



EXXONMOBIL
ATLANTA, DEKALB COUNTY, GEORGIA
**SITE DELINEATION REPORT AND REMOVAL
ACTION WORK PLAN**
**GROUNDWATER, SURFACE WATER, AND
SEDIMENT SAMPLE LOCATIONS**
 ARCADIS
FIGURE
2-2

CITY: CARY DIV: GROWTH & DEVELOPMENT LD: LEE LYRON: OFF-REF: G:\ENVCAD\cary\ACT\B0857250001\00005\MAPREPORT\DRRAW\B085725005.dwg LAYOUT: 3-1 SAVED: 2/10/2009 10:24 AM ACADVER: 17.18 (LIS TECH) PAGES: 17 PLOTTED: 2/10/2009 10:50 AM BY: ELLIS, LEKOREY
XREFS: 85725XDL 85725X01.jpg PROJECTNAME: —



LEGEND:

- PROBABLE BOUNDARIES OF FORMER VIRGINIA CAROLINA CHEMICAL CORPORATION PROPERTY
- APPROXIMATE LOCATION OF CURRENT PROPERTY LINES
- APPROXIMATE LOCATION OF SURFACE WATER FEATURE
- SOIL BORING AND SAMPLE LOCATION
- LOCATION OF SOIL BORING EXCEEDING ARSENIC AND/OR LEAD SCREENING LEVELS
- ACCESS NOT GRANTED

NOTES:

1. FORMER PROPERTY BOUNDARY BASED ON HISTORICAL DEEDS AND 1902 PLAT MAP.
2. PARCEL BOUNDARIES DIGITIZED FROM 2004 DEKALB COUNTY TAX MAP.
3. 2008 AERIAL PROVIDED BY TELE ATLAS AND ACXICOM.
4. ALL LOCATIONS ARE APPROXIMATE.
5. HISTORICAL SITE FEATURES BASED ON HISTORICAL MAPS.
6. SOIL BORING PREFIXES BEGIN WITH "ATL-SB-".
7. SCREENING LEVELS ARE IN MILLIGRAMS PER KILOGRAM (mg/kg).

SCREENING LEVELS		
	ARSENIC	LEAD
RESIDENTIAL	27	400
COMMERCIAL	27	800



EXXONMOBIL
ATLANTA, DEKALB COUNTY, GEORGIA
**SITE DELINEATION REPORT AND REMOVAL
ACTION WORK PLAN**

**LOCATIONS OF SOIL SAMPLES EXCEEDING
SCREENING LEVELS**

FIGURE
3-1

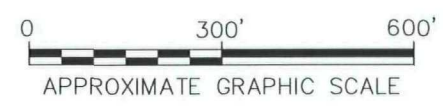
CITY: GARY DIVISION: 35 LD: LEE LYN: ON-OFF-REF: G:\ENVCAD\city\ACT\B085725\0001\0000\MAP\REPORT\SDRR\AWP\85725B03.dwg LAYOUT: 3-2 SAVED: 2/10/2009 10:25 AM ACADVER: 17.15 LMS TECH: PLOTSETUP: — PLOTSTYLETABLE: PLTPULL.CTB PLOTTED: 2/10/2009 10:48 AM BY: ELLIS, LEKOREY XREFS: 85725X01.dwg PROJECTNAME: 85725X01



LEGEND:

- PROBABLE BOUNDARIES OF FORMER VIRGINIA CAROLINA CHEMICAL CORPORATION PROPERTY
- APPROXIMATE LOCATION OF CURRENT PROPERTY LINES
- APPROXIMATE LOCATION OF SURFACE WATER FEATURE
- MONITORING WELL LOCATION
- STREAM GAUGE LOCATION
- (999.18) GROUNDWATER ELEVATION (FEET)
- DIRECTION OF GROUNDWATER FLOW
- GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)

- NOTES:
1. FORMER PROPERTY BOUNDARY BASED ON HISTORICAL DEEDS AND 1902 PLAT MAP.
 2. PARCEL BOUNDARIES DIGITIZED FROM 2004 DEKALB COUNTY TAX MAP.
 3. 2008 AERIAL PROVIDED BY TELE ATLAS AND ACXICOM.
 4. MONITORING WELL AND STREAM GAUGE SAMPLE PREFIXES BEGIN WITH "ATL-".
 5. GROUNDWATER ELEVATIONS SURVEYED IN REFERENCE TO NORTH AMERICAN VERTICAL DATUM OF 1929.



EXXONMOBIL
ATLANTA, DEKALB COUNTY, GEORGIA
**SITE DELINEATION REPORT AND REMOVAL
ACTION WORK PLAN**
**SHALLOW GROUNDWATER
POTENTIOMETRIC SURFACE MAP -
JUNE 27, 2008**

ARCADIS

FIGURE
3-2

CITY: GARY DIVISION: 35 LD: LEE LYRON: OFF-REF: G:\ENV\CAD\CITY\ACT\B0857250001\00005\MAP\REPORTS\DRR\DWG\85725B04.dwg LAYOUT: 3-3 SAVED: 2/10/2009 10:28 AM ACADVER: 17.15 (LMS TECH) PAGES: 17 PLOT: 2/10/2009 10:49 AM BY: ELIUS LEKOREY
XREFS: IMAGES: PROJECTNAME: 85725X01 85725X01.dwg



LEGEND:

- PROBABLE BOUNDARIES OF FORMER VIRGINIA CAROLINA CHEMICAL CORPORATION PROPERTY
- APPROXIMATE LOCATION OF CURRENT PROPERTY LINES
- APPROXIMATE LOCATION OF SURFACE WATER FEATURE
- MONITORING WELL LOCATION

- NOTES:
1. FORMER PROPERTY BOUNDARY BASED ON HISTORICAL DEEDS AND 1902 PLAT MAP.
 2. PARCEL BOUNDARIES DIGITIZED FROM 2004 DEKALB COUNTY TAX MAP.
 3. 2008 AERIAL PROVIDED BY TELE ATLAS AND ACXICOM.
 4. MONITORING WELL SAMPLE PREFIXES BEGIN WITH "ATL-".
 5. GROUNDWATER RESULTS ARE SHOWN IN MICROGRAMS PER LITER (ug/L).
 6. DUPLICATE RESULTS ARE SHOWN IN BRACKETS.
 7. SCREENING LEVELS FOR GROUNDWATER ARE:
ARSENIC 10 ug/L
LEAD 15 ug/L
 8. SHADED VALUES EXCEED THE SCREENING LEVELS.

EXXONMOBIL
ATLANTA, DEKALB COUNTY, GEORGIA
SITE DELINEATION REPORT AND REMOVAL ACTION WORK PLAN

GROUNDWATER SAMPLE ANALYTICAL RESULTS

ARCADIS

FIGURE 3-3

CITY: GARY DIVISION: 95 ID: LEE LYN-ON-OFF-REF: G:\ENVCAD\GARY\250001\000000\MAP\REPORT\SDRRAMP\85725X01.dwg LAYOUT: 3-4 SAVED: 2/10/2009 10:26 AM ACADVER: 17.15 (LMS TECH) PLOTSETUP: — PLOTSTYLETABLE: PLTPULL.CTB PLOTTED: 2/10/2009 10:50 AM BY: ELLIS, LEKOREY
XREFS: 85725X01.dwg
IMAGES: 85725X01.dwg
PROJECTNAME: —



SW-02/SD-02			
SW-02		SD-02	
Arsenic	8.5 J ug/L	Arsenic	10.4 mg/kg
Lead	4.3 J ug/L	Lead	83.4 J mg/kg

SW-04/SD-04			
SW-04		SD-04	
Arsenic	4.8 U ug/L	Arsenic	2.74 mg/kg
Lead	2.2 U ug/L	Lead	33 J mg/kg

SW-03/SD-03			
SW-03		SD-03	
Arsenic	4.8 U [4.8 U] ug/L	Arsenic	1.15 U [1.79] mg/kg
Lead	2.2 U [2.2 U] ug/L	Lead	6.72 J [7.17 J] mg/kg

SW-01/SD-01			
SW-01		SD-01	
Arsenic	4.8 U ug/L	Arsenic	3.75 mg/kg
Lead	2.2 U ug/L	Lead	28.3 J mg/kg

LEGEND:

- PROBABLE BOUNDARIES OF FORMER VIRGINIA CAROLINA CHEMICAL CORPORATION PROPERTY
- APPROXIMATE LOCATION OF CURRENT PROPERTY LINES
- APPROXIMATE LOCATION OF SURFACE WATER FEATURE
- SURFACE WATER SAMPLE LOCATION
- SEDIMENT SAMPLE LOCATION

- NOTES:
- FORMER PROPERTY BOUNDARY BASED ON HISTORICAL DEEDS AND 1902 PLAT MAP.
 - PARCEL BOUNDARIES DIGITIZED FROM 2004 DEKALB COUNTY TAX MAP.
 - 2008 AERIAL PROVIDED BY TELE ATLAS AND ACXICOM.
 - SURFACE WATER/SEDIMENT SAMPLE PREFIXES BEGIN WITH "ATL-".
 - SURFACE WATER RESULTS ARE SHOWN IN MICROGRAMS PER LITER (ug/L); SEDIMENT RESULTS ARE SHOWN IN MILLIGRAMS PER KILOGRAM (mg/kg).
 - DUPLICATE RESULTS ARE SHOWN IN BRACKETS.
 - SCREENING LEVELS FOR STORM WATER ARE:
ARSENIC 10 ug/L
LEAD 15 ug/L
 - SCREENING LEVELS FOR SEDIMENT ARE:
ARSENIC 27 mg/kg
LEAD 400 mg/kg



EXXONMOBIL
ATLANTA, DEKALB COUNTY, GEORGIA
**SITE DELINEATION REPORT AND REMOVAL
ACTION WORK PLAN**






**SURFACE WATER AND SEDIMENT
SAMPLE ANALYTICAL RESULTS**

ARCADIS

FIGURE
3-4



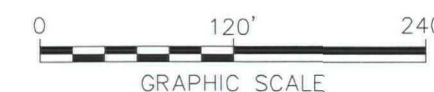
LEGEND:

-  PROBABLE BOUNDARIES OF FORMER VIRGINIA CAROLINA CHEMICAL CORPORATION PROPERTY
 APPROXIMATE LOCATION OF CURRENT PROPERTY LINES
 APPROXIMATE LOCATION OF SURFACE WATER FEATURE
 SOIL BORING AND SAMPLE LOCATION
 LOCATION OF SOIL BORING EXCEEDING ARSENIC AND/OR LEAD SCREENING LEVELS (DEPTH OF EXCEEDANCE INSIDE BORING SYMBOL)

NOTES:

1. FORMER PROPERTY BOUNDARY BASED ON HISTORICAL DEEDS AND 1902 PLAT MAP.
2. PARCEL BOUNDARIES DIGITIZED FROM 2004 DEKALB COUNTY TAX MAP.
3. 2008 AERIAL PROVIDED BY TELE ATLAS AND ACXICOM.
4. SAMPLE LOCATIONS SURVEYED BY DLM CIVIL ENGINEERING AND LAND SURVEYING, INC.
5. SOIL BORING PREFIXES BEGIN WITH "ATL-SB-".
6. SCREENING LEVELS ARE IN mg/kg.

SCREENING LEVELS		
	ARSENIC	LEAD
RESIDENTIAL	27	40
COMMERCIAL	27	80

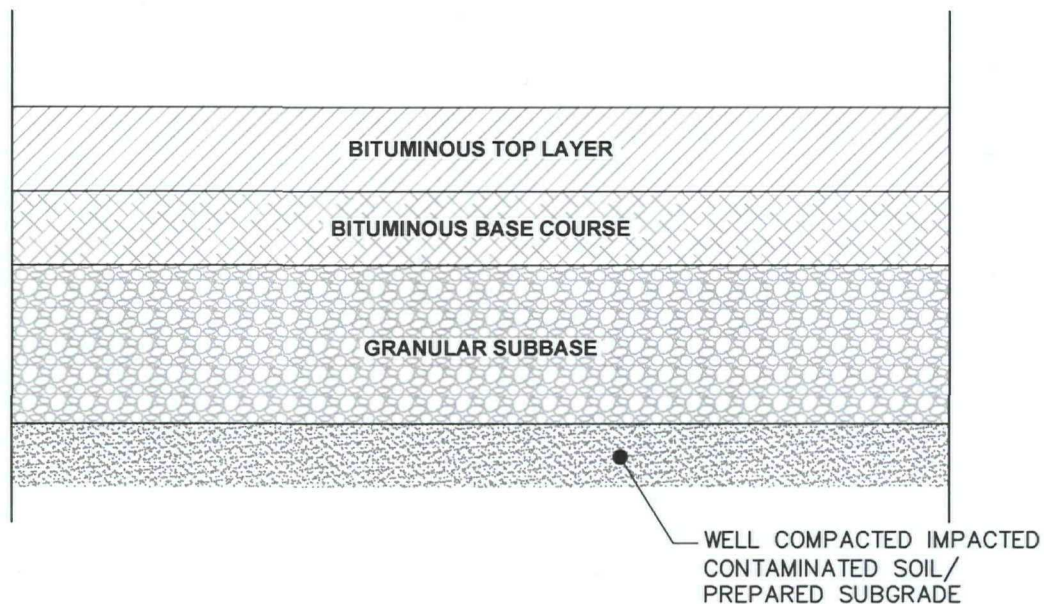


EXXONMOBIL
ATLANTA, DEKALB COUNTY, GEORGIA
**SITE DELINEATION REPORT AND REMOVAL
ACTION WORK PLAN**

SUMMARY OF REMOVAL ACTION



FIGURE 4-1



ASPHALT COVER

NOT TO SCALE

NOTE:

ACTUAL DESIGN WILL BE SUBMITTED BY
ARCADIS AFTER CONSULTATION WITH
PROPERTY OWNER. ASPHALT COVER WILL
BE DESIGNED BASED ON THE INTENDED
FUTURE USE BY THE PROPERTY OWNER.

EXXONMOBIL
ATLANTA, DEKALB COUNTY, GEORGIA
**SITE DELINEATION REPORT AND REMOVAL
ACTION WORK PLAN**

**TYPICAL ASPHALT COVER
CROSS-SECTION**



FIGURE
5-1

ARCADIS

Appendix A

Visual Soil Classifications

Appendix A
Visual Soil Classifications
Site Delineation Report and Removal Action Work Plan
VCC-Atlanta, DeKalb County, Georgia

Soil Boring	Depth Interval (feet)	USCS Classification	Soil Lithology/Characteristics
ATL-SB-001	0-0.5	ml	clayey SILT, reddish brown, micaceous, trace sand and gravel, organics (roots), soft, damp, no odor
ATL-SB-001	0.5-2	ml	clayey SILT, reddish brown, organics (roots), stiff, damp, no odor. Refusal encountered at 2 feet.
ATL-SB-002	0-0.5	ml	clayey SILT, brownish red, micaceous, trace gravel, organics (roots), soft to med stiffness, moist, no odor
ATL-SB-002	0.5-2	ml	clayey SILT, brownish red, micaceous, trace gravel, organics (roots), med stiffness, moist, no odor
ATL-SB-002	2-4	ml	clayey SILT, brownish red, micaceous, trace gravel, organics (roots), soft, moist, no odor
ATL-SB-003	0-0.5	ml	clayey SILT, brown and red, micaceous, trace gravel, organics (roots), soft, moist, no odor
ATL-SB-003	0.5-2	ml	clayey SILT, reddish brown, micaceous, organics (roots), stiff, moist, no odor
ATL-SB-003	2-4	ml	clayey SILT, tan and brownish red, micaceous, trace gravel, organics (roots), stiff, damp to moist, no odor
ATL-SB-004	0-0.5	ml	clayey SILT, brownish red, micaceous, trace gravel, organics (roots), soft to med stiffness, damp, no odor
ATL-SB-004	0.5-2	sm	silty SAND, brownish red, micaceous, trace clay and gravel, trace organics, loose, dry to moist, no odor
ATL-SB-004	2-4	ml	sandy SILT, brown and red, micaceous, trace clay, organics (roots), loose, dry to damp, no odor
ATL-SB-005	0-0.5	ml	clayey SILT, brown and red, micaceous, organics (roots), soft to stiff, damp, no odor
ATL-SB-005	0.5-2	ml	clayey SILT, reddish brown, micaceous, trace gravel, trace organics, soft to stiff, damp, no odor
ATL-SB-005	2-4	ml	clayey SILT, brownish red, micaceous, trace grey sand, trace organics, soft, damp to wet, no odor
ATL-SB-006	0-0.5	ml	clayey SILT, brown, micaceous, organics (roots), soft to stiff, damp to very damp, no odor
ATL-SB-006	0.5-2	ml	clayey SILT, brown and red, micaceous, trace organics, stiff, damp, no odor
ATL-SB-006	2-4	sm	sandy SILT, brown and grey, micaceous, trace brown clay and gravel, organics (roots), loose to soft, damp to wet, no odor
ATL-SB-007	0-0.5	ml	clayey SILT, brownish tan, micaceous, trace sand, organics (roots), stiff, moist, no odor
ATL-SB-007	0.5-2	sm	sandy SILT, brown and orange, micaceous, trace clay and gravel, loose to soft, dry to moist, no odor. Refusal encountered at 2 feet.
ATL-SB-008	0-0.5	ml	clayey SILT, brown, micaceous, organics (roots), soft to stiff, damp to very damp, no odor
ATL-SB-008	0.5-2	ml	clayey SILT, brownish red, micaceous, trace organics (roots), stiff, damp, no odor
ATL-SB-008	2-4	ml	clayey SILT, brown, red and tan, micaceous, trace gravel, stiff, damp, no odor
ATL-SB-009	0-0.5	ml	silty CLAY, brown and red, micaceous, orange organics (roots), stiff, moist to damp, no odor
ATL-SB-009	0.5-2	ml	clayey SILT, orange and brown, micaceous, trace organics, soft to stiff, damp, no odor
ATL-SB-009	2-4	ml	clayey SILT, brownish red, micaceous, trace organics, soft to stiff, damp, no odor
ATL-SB-010	0-0.5	ml	clayey SILT, brown, micaceous, organics (roots), soft, dry to moist, no odor
ATL-SB-010	0.5-2	ml	clayey SILT, brownish red, micaceous, trace gravel, trace organics, stiff, damp to moist, no odor
ATL-SB-010	2-4	ml	clayey SILT, brown and red, micaceous, trace organics, stiff, damp, no odor
ATL-SB-011	0-0.5	ml	clayey SILT, brownish red, micaceous, trace gravel, organics (roots), soft, damp to moist, no odor
ATL-SB-011	0.5-2	ml	clayey SILT, yellowish brown, micaceous, trace organics, stiff, moist, no odor
ATL-SB-011	2-4	ml	clayey SILT, yellowish brown, micaceous, trace gravel, stiff, damp, no odor

Appendix A
Visual Soil Classifications
Site Delineation Report and Removal Action Work Plan
VCC-Atlanta, DeKalb County, Georgia

Soil Boring	Depth Interval (feet)	USCS Classification	Soil Lithology/Characteristics
ATL-SB-012	0-0.5	ml	clayey SILT, brown and red, micaceous, organics (roots), soft, damp to very damp, no odor
ATL-SB-012	0.5-2	ml	clayey SILT, reddish brown, micaceous, trace sand, organics (roots), loose to soft, damp to moist, no odor
ATL-SB-012	2-4	sm	sandy SILT, brownish red, micaceous, trace gravel, trace organics, loose, dry to moist, no odor
ATL-SB-013	0-0.5	ml	clayey SILT, brown, micaceous, trace gravel, organics (roots), soft, dry to moist, no odor
ATL-SB-013	0.5-2	ml	clayey SILT, brownish red, micaceous, trace sand, organics (roots), soft, damp to very damp, no odor
ATL-SB-013	2-4	ml	clayey SILT, brown and red, micaceous, trace sand, organics (roots), soft, damp to wet, no odor
ATL-SB-014	0-0.5	ml	clayey SILT, brown and red, micaceous, trace inorganics (glass), organics (roots), soft to stiff, damp to wet, no odor
ATL-SB-014	0.5-2	ml	clayey SILT, reddish brown, micaceous, trace inorganics (glass), organics (roots), soft to stiff, damp to wet, no odor
ATL-SB-014	2-4	ml	clayey SILT, reddish brown, micaceous, trace gravel, trace organics, soft, damp to moist, no odor
ATL-SB-015	0-0.5	ml	clayey SILT, light brown and red, micaceous, organics (roots), stiff, moist, no odor
ATL-SB-015	0.5-2	ml	clayey SILT, brown and red, micaceous, trace gravel, trace organics, stiff, dry to moist, no odor
ATL-SB-015	2-4	ml	clayey SILT, brown and red, micaceous, trace gravel, trace organics, soft to stiff, dry to moist, no odor
ATL-SB-016	0-0.5	ml	clayey SILT, reddish brown, micaceous, trace sand and gravel, trace organics, loose, dry, no odor
ATL-SB-016	0.5-2	sm	sandy SILT reddish brown, micaceous, trace gravel, trace fine-grained organics, loose, dry to moist, no odor
ATL-SB-016	2-2.5	ml	silty CLAY, reddish brown, gravel, dry to moist, loose, no odor. Refusal encountered at 2.5 feet.
ATL-SB-017	0-0.5	sm	silty SAND, brown, micaceous, rounded gravel, organics roots, loose, moist, no odor
ATL-SB-017	0.5-2	ml	clayey SILT, red, micaceous, trace sand, trace organics, loose, moist, no odor
ATL-SB-017	2-4	ml	clayey SILT, brownish red, micaceous, trace sand, loose, moist, no odor
ATL-SB-018	0-0.5	sm	sandy SILT, brown and red, micaceous, trace gravel, organics (roots), soft to stiff, damp to moist, no odor
ATL-SB-018	0.5-2	ml	clayey SILT, brown and red, micaceous, trace gravel, organics (roots), soft, damp to moist, no odor. Refusal encountered at 2 feet.
ATL-SB-019	0-0.5	ml	clayey SILT, brown and red, micaceous, trace gravel, organics (roots), stiff, damp, no odor
ATL-SB-019	0.5-2	ml	clayey SILT, brown and red, micaceous, trace gravel, organics (roots), stiff, damp, no odor. Refusal encountered at 2 feet.
ATL-SB-020	0-0.5	ml	clayey SILT, brown and red, micaceous, trace gravel and inorganics (glass), organics (roots), soft, damp, no odor
ATL-SB-020	0.5-2	ml	clayey SILT, brown and red, micaceous, trace gravel, organics (roots), soft to stiff, damp, no odor. Refusal encountered at 2 feet.
ATL-SB-020	2-4'	ml	not recorded
ATL-SB-020	4-6'	ml	clayey SILT, light grey, matted brown, stiff, low-medium plasticity, slightly damp, no odor.
ATL-SB-020	6-8'	ml	clayey SILT, light grey, matted brown, stiff, low-medium plasticity, slightly damp, no odor, slightly damp, no odor
ATL-SB-021	0-0.5	ml	clayey SILT, brown and red, micaceous, organics (roots), soft, damp to moist, no odor
ATL-SB-021	0.5-2	ml	clayey SILT, brown and yellow, micaceous, trace gravel, organics (roots), stiff, damp to moist, no odor
ATL-SB-021	2-4	ml	clayey SILT, dark brown, micaceous, trace gravel, organics (roots), stiff, damp to moist, no odor

Appendix A
Visual Soil Classifications
Site Delineation Report and Removal Action Work Plan
VCC-Atlanta, DeKalb County, Georgia

Soil Boring	Depth Interval (feet)	USCS Classification	Soil Lithology/Characteristics
ATL-SB-022	0-0.5	ml	clayey SILT, brown, micaceous, organics (roots), soft to stiff, damp to moist, no odor
ATL-SB-022	0.5-2	ml	clayey SILT, brownish red, micaceous, trace gravel, organics (roots), stiff, damp to moist, no odor
ATL-SB-022	2-4	ml	clayey SILT, brown and red, micaceous, trace gravel, trace organics, stiff, damp to moist, no odor
ATL-SB-023	0-0.5	ml	clayey SILT, brown, micaceous, trace gravel, organics (roots), soft, dry to moist, no odor
ATL-SB-023	0.5-2	ml	clayey SILT, brown and red, micaceous, trace sand, organics (roots), soft to stiff, damp to moist, no odor
ATL-SB-023	2-4	ml	clayey SILT, brown and red, micaceous, trace sand, organics (roots), soft to stiff, damp to moist, no odor
ATL-SB-025	0-0.5	ml	clayey SILT, brown and red, micaceous, trace gravel, organics (roots), soft to loose, dry to moist, no odor
ATL-SB-025	0.5-2	ml	clayey SILT, brown and red, micaceous, organics (roots), soft to stiff, dry to moist, no odor
ATL-SB-025	2-4	ml	clayey SILT, brown and red, micaceous, organics (roots), soft to stiff, dry to moist, no odor
ATL-SB-027	0-0.5	ml	clayey SILT, brown, micaceous, trace organics, soft, dry to moist, no odor
ATL-SB-027	0.5-2	ml	clayey SILT, brown and red, micaceous, organics (roots), loose to soft, damp to moist, no odor. Refusal at 2 feet.
ATL-SB-027	4-6'	ml	clayey SILT, reddish brown, medium stiff, micaceous, dry, no odor, low plasticity
ATL-SB-027	4-6'	ml	clayey SILT, reddish brown, medium stiff, micaceous, dry, no odor, low plasticity
ATL-SB-028	0-0.5		asphalt
ATL-SB-028	0.5-1	sc	sandy CLAY, red and grey, basal asphalt material, stiff, moist, no odor. Refusal encountered at 1 foot.
ATL-SB-028	4-6'	ml	SILT, brown, trace clay, trace fines, loose, dry, no odor, micaceous
ATL-SB-028	4-6'	ml	SILT, brown, trace clay, trace fines, loose, dry, no odor, micaceous
ATL-SB-029	0-0.5	ml	clayey SILT, dark brown, micaceous, organics (roots), soft, dry to moist, no odor
ATL-SB-029	0.5-2	ml	clayey SILT, red and brown, micaceous, trace gravel, trace organics, soft, damp to moist, no odor
ATL-SB-029	2-4	ml	clayey SILT, brownish red, micaceous, trace gravel, trace organics, stiff, damp, no odor
ATL-SB-029	2-4	ml	clayey SILT, brownish red, micaceous, trace gravel, trace organics, stiff, damp, no odor
ATL-SB-030	0-0.5		asphalt
ATL-SB-030	0.5-2	ml	clayey SILT, dark brown and yellowish tan, rounded gravel and pebbles, loose, moist, no odor
ATL-SB-030	2-4	ml	clayey SILT, red, micaceous, trace sand, stiff, damp, no odor
ATL-SB-030	2-4	ml	clayey SILT, red, micaceous, trace sand, stiff, damp, no odor
ATL-SB-031	0-0.5		asphalt
ATL-SB-031	0.5-2	ml	clayey SILT, red, basal asphalt material, stiff, moist, no odor
ATL-SB-031	2-4	ml	clayey SILT, brownish red, clean, loose, moist no odor
ATL-SB-031	2-4	ml	clayey SILT, brownish red, clean, loose, moist no odor
ATL-SB-032	0-0.5	sm	sandy SILT, red and brown, micaceous, trace gravel, organics (roots), soft, dry to moist, no odor
ATL-SB-032	0.5-2	sm	sandy SILT, red and brown, micaceous, trace gravel, organics (roots), soft, dry to moist, no odor. Refusal encountered at 2 feet.
ATL-SB-032	0.5-2	sm	sandy SILT, red and brown, micaceous, trace gravel, organics (roots), soft, dry to moist, no odor. Refusal encountered at 2 feet.

Appendix A
Visual Soil Classifications
Site Delineation Report and Removal Action Work Plan
VCC-Atlanta, DeKalb County, Georgia

Soil Boring	Depth Interval (feet)	USCS Classification	Soil Lithology/Characteristics
ATL-SB-033	0-0.5	sm	sandy SILT, brown, micaceous, trace clay and gravel, organics, loose to soft, damp to moist, no odor
ATL-SB-033	0.5-2	ml	clayey SILT, reddish brown, micaceous, trace gravel, trace inorganics (nails), trace organics, soft, damp, no odor
ATL-SB-033	2-2.5	ml	clayey SILT, reddish brown, micaceous, trace gravel, trace organics, soft, damp, no odor. Refusal encountered at 2.5 feet.
ATL-SB-034	0-0.5	sm	sandy SILT, dark brown, micaceous, trace silt, abundant organics (roots) loose, moist, no odor
ATL-SB-034	0.5-2	ml	clayey SILT, brownish red, trace sand and gravel, soft, moist, no odor
ATL-SB-034	2-4	ml	clayey silt, reddish brown, micaceous, trace pebbles soft, moist, no odor
ATL-SB-035	0-0.5	sm	silty SAND, grayish tan., lithic gravel to cobbles, loose, no odor
ATL-SB-035	0.5-2	ml	clayey SILT, reddish brown, micaceous, soft, dry to moist, no odor
ATL-SB-035	2-4	ml	clayey SILT, reddish brown, micaceous, stiff, dry, no odor
ATL-SB-036	0-0.5	ml	clayey SILT, dark brown and red, micaceous, pebbles, organics (twigs), charcoal, stiff, damp, no odor
ATL-SB-036	0.5-2	ml	clayey SILT, red, micaceous, charcoal, soft, moist, no odor
ATL-SB-036	2-4	ml	clayey SILT, brownish red, micaceous, trace gravel lithic, soft, moist, no odor
ATL-SB-037	0-0.5	sc	sandy CLAY, brown, micaceous, rounded pebbles and gravel, organics (roots), soft, moist, no odor
ATL-SB-037	0.5-2	ml	sandy SILT, tan to beige, trace organics, loose, dry, no odor
ATL-SB-037	2-4	ml	sandy SILT, tan to beige, trace organics, loose, dry, no odor
ATL-SB-038	0-0.5	sc	sandy CLAY, brown, rounded pebbles, organics (roots), soft, moist, no odor
ATL-SB-038	0.5-1.5	sc	sandy CLAY, dark brown, micaceous, trace pebbles, trace organics, soft, moist no odor. Refusal encountered at 1.5 feet.
ATL-SB-039	0-0.5	ml	silty CLAY, dark brown and red, micaceous, organics (roots), stiff, moist, ammonia smell
ATL-SB-039	0.5-2	ml	silty CLAY, brownish grey, trace charcoal, slight ammonia smell. Refusal encountered at 2 feet.
ATL-SB-040	0-0.5	ml	silty CLAY, reddish brown, micaceous, organics (roots), charcoal, soft, moist, no odor
ATL-SB-040	0.5-2	ml	silty CLAY, reddish brown, micaceous, soft, moist, no odor, grading into granular charcoal and vesicular slag
ATL-SB-040	2-4	ml	silty CLAY, reddish brown, micaceous, soft, moist, no odor, mixed with granular charcoal and vesicular slag
ATL-SB-042	0-0.5	ml	clayey SILT, reddish brown, trace organics, soft, damp, no odor
ATL-SB-042	0.5-2	ml	clayey SILT, reddish brown, trace gravel, charcoal, soft, damp to wet, no odor
ATL-SB-042	2-4	ml	clayey SILT, reddish brown, trace gravel and pebbles, charcoal, soft, wet, no odor
ATL-SB-043	0-0.5		asphalt
ATL-SB-043	0.5-2	ml	clayey SILT, brownish red, micaceous, trace sand and gravel, trace organics, stiff, damp to moist, no odor
ATL-SB-043	2-4	ml	clayey SILT, brownish red, micaceous, trace sand and gravel, trace organics, stiff, damp to moist, no odor
ATL-SB-044	0-0.5	sm	sandy SILT, reddish brown, lithic pebbles, fine grained organics, loose, moist, no odor
ATL-SB-044	0.5-2	ml	silty CLAY, brown, trace sand, trace organics, loose, moist, no odor
ATL-SB-044	2-4	ml	silty CLAY, red and brown, trace gravel, stiff, damp, no odor

Appendix A
Visual Soil Classifications
Site Delineation Report and Removal Action Work Plan
VCC-Atlanta, DeKalb County, Georgia

Soil Boring	Depth Interval (feet)	USCS Classification	Soil Lithology/Characteristics
ATL-SB-046	0-0.5	sc	clayey SAND, grey, lithic pebbles, organics (roots), soft, moist, no odor
ATL-SB-046	0.5-2	ml	clayey SILT, red and grey, abundant sand and gravel, soft, moist, no odor
ATL-SB-046	2-3.5	ml	clayey SILT, reddish brown, micaceous, gravel and sans, charcoal, soft, moist no odor. Refusal encountered at 3.5 feet.
ATL-SB-047	0-0.5	ml	clayey SILT, brown and red, gravel and pebbles, organics (roots), soft, moist, no odor
ATL-SB-047	0.5-2	ml	clayey SILT, brown and red, micaceous, charcoal, trace organics, soft, moist, no odor
ATL-SB-047	2-4	ml	clayey SILT, brown, micaceous, trace sand, organics (roots), soft, moist, no odor
ATL-SB-048	0-0.5	sm	sandy SILT, brown, micaceous, pebbles, organics (roots), soft, damp to moist, no odor
ATL-SB-048	0.5-2	ml	clayey SILT, reddish brown, micaceous, trace sand and pebbles, organics (roots), soft, damp, no odor
ATL-SB-048	2-4	ml	clayey SILT, brownish red, micaceous, trace sand, loose, damp, no odor
ATL-SB-049	0-0.5	sm	sandy SILT, dark brown, organic rich, loose, moist, no odor
ATL-SB-049	0.5-2	ml	clayey SILT, reddish brown, micaceous, trace sand, charcoal, organics (roots), soft, moist no odor. Refusal encountered at 2 feet.
ATL-SB-050	0-0.5	sc	sandy CLAY, trace sand and gravel and pebbles, soft, moist, no odor
ATL-SB-050	0.5-1.75	sc	clayey SAND, light brown, trace silt and pebbles, soft, moist, no odor. Refusal encountered at 1.75 feet.
ATL-SB-051	0-0.5	ml	SILT, light grey and brown, dry, loose, no odor
ATL-SB-051	0.5-2	ml	clayey SILT, reddish brown, trace organics, loose, damp, no odor. Refusal encountered at 2 feet.
ATL-SB-052	0-0.5	sm	sandy SILT, brown, trace clay and gravel, organic rich, organics (roots), soft, moist, no odor
ATL-SB-052	0.5-2	sm	sandy SILT, brown, sand, gravel, trace clay, trace organics (roots), loose, moist, no odor
ATL-SB-052	2-3	sm	sandy SILT, reddish brown, granite pebbles, charcoal, soft, moist, no odor. Refusal encountered at 3 feet.
ATL-SB-053	0-0.5	ml	clayey SILT, brown, micaceous, trace gravel, loose, damp, no odor
ATL-SB-053	0.5-2	ml	clayey SILT, brown, micaceous, trace gravel, loose, damp, no odor. Refusal encountered at 2 feet.
ATL-SB-054	0-0.5	ml	clayey SILT, brown, micaceous, trace gravel, trace organics, loose, damp, no odor
ATL-SB-054	0.5-2	ml	clayey SILT, reddish brown, micaceous, trace gravel, trace organics, loose, damp, no odor
ATL-SB-054	2-4	sm	silty SAND, light grey and yellowish brown and white, micaceous, loose, damp, no odor
ATL-SB-056	0-0.5	ml	clayey SILT, reddish brown, micaceous, trace organics, loose damp, no odor
ATL-SB-056	0.5-2	ml	clayey SILT, reddish brown, micaceous, trace yellow and brown silt, trace organics, loose damp, no odor
ATL-SB-056	2-4	ml	SILT, brown, micaceous, trace gravel, loose, damp, no odor
ATL-SB-057	0-0.5	ml	clayey SILT, reddish brown, micaceous, trace organics, stiff, damp, no odor
ATL-SB-057	0.5-2	ml	clayey SILT, reddish brown, trace organics, loose, damp, no odor
ATL-SB-057	2-4	ml	clayey SILT, reddish brown, trace organics, very loose, damp, no odor
ATL-SB-058	0-0.5	ml	clayey SILT, reddish brown, trace organics, stiff, damp, no odor
ATL-SB-058	0.5-2	ml	clayey SILT, reddish brown, stiff, damp, no odor
ATL-SB-058	2-4	ml	clayey SILT, reddish brown, stiff, damp, no odor

Appendix A
Visual Soil Classifications
Site Delineation Report and Removal Action Work Plan
VCC-Atlanta, DeKalb County, Georgia

Soil Boring	Depth Interval (feet)	USCS Classification	Soil Lithology/Characteristics
ATL-SB-059	0-0.5	ml	clayey SILT, brown, micaceous, trace sand, organics (roots), soft, moist, no odor
ATL-SB-059	0.5-2	ml	clayey SILT, reddish brown, micaceous, trace sand, soft, moist, no odor
ATL-SB-059	2-4	ml	clayey SILT, reddish brown, micaceous, trace sand, trace organics, soft, moist, no odor
ATL-SB-060	0-0.5	sc	sandy CLAY, dark brown, organic rich, organics (roots), soft, moist, no odor
ATL-SB-060	0.5-2	ml	clayey SILT, brown, micaceous, organics (roots), soft, moist, no odor
ATL-SB-060	2-3	ml	clayey SILT, red and grey, micaceous, organics (roots), soft, damp to wet, no odor. Refusal encountered at 3 feet.
ATL-SB-061	0-0.5	ml	clayey SILT, reddish brown, organic rich, organics (roots), loose, damp to moist, no odor
ATL-SB-061	0.5-2	ml	clayey SILT, brown, trace sand, organics (roots), soft, moist, no odor
ATL-SB-061	2-4	ml	clayey SILT, brownish red, trace organics, soft, moist, no odor
ATL-SB-065	0-0.5	ml	clayey SILT, brown and red, fine grained organics and roots, loose, moist, on odor
ATL-SB-065	0.5-2	ml	clayey SILT, brown and red, micaceous, trace sand, organics (roots), charcoal, moist, no odor
ATL-SB-065	2-3.5	ml	clayey SILT, brown and red, micaceous, trace sand and lithic gravel, charcoal, stiff, moist, no odor. Refusal encountered at 3.5 feet.
ATL-SB-065	4-6'	ml	SILT, dark reddish brown, very loose, micaceous, dry, no odor, trace fine gravel
ATL-SB-065	6-8'	ml	clayey silt, light brown, slightly damp-damp, medium soft-stiff, micaceous, minor debris (rubber), Refusal encountered at 7.5 feet.
ATL-SB-066	0-0.5	ml	SILT, dark brown, very loose, rootlets, no odor, dry, no plasticity.
ATL-SB-066	0.5-2	ml	clayey SILT, dark brown, slight plasticity, micaceous, soft, no odor, slightly damp
ATL-SB-067	0-0.5	ml	SILT, trace clay, lt. brown, loose, micaceous, dry, rootlets, no odor.
ATL-SB-067	0.5-2	ml	SILT, reddish brown, loose, trace fine and coarse gravel GRAVEL/SLAG with magenta staining, no odor, dry
ATL-SB-067	2-4'	ml	SILT, reddish brown, loose, trace fine and coarse gravel GRAVEL/SLAG with magenta staining, no odor, dry, trace fine SLAG, less than 0.5-2' interval, no odor, dry. Refusal encountered at 3.5 feet, offset to west at SB-78
ATL-SB-068	0-0.5	ml	SILT, reddish brown, loose-coarse, trace fines, rootlets, dry, no odor
ATL-SB-068	0.5-2	ml	SILT, reddish brown, loose-coarse, trace fines, rootlets, dry, no odor
ATL-SB-068	2-4'	ml	SILT, reddish brown, loose-coarse, trace fines, rootlets, dry, no odor
ATL-SB-069	0-0.5	ml	SILT, loose, rootlets, trace clay, trace magenta SLAG, no odor, dry.
ATL-SB-069	0.5-2	ml	SILT, loose, rootlets, trace clay, medium dense, trace magenta SLAG, no odor, dry.
ATL-SB-069	2-4'	ml	SILT, loose, rootlets, trace clay, dry, no odor, NO SLAG OBSERVED
ATL-SB-069	4-6'	ml	Refusal encountered at 3.5 feet.
ATL-SB-070	0-0.5	ml	SILT, loose, trace fine-coarse gravel, dark brown, dry, rootlets, no odor
ATL-SB-070	0.5-2	ml	SILT, loose, trace fine-coarse gravel, dark brown, rootlets, trace clay, no odor, dry
ATL-SB-070	2-4'	ml	clayey SILT, no-low plasticity, reddish brown-brown, micaceous, slightly damp, no odor

Appendix A
Visual Soil Classifications
Site Delineation Report and Removal Action Work Plan
VCC-Atlanta, DeKalb County, Georgia

Soil Boring	Depth Interval (feet)	USCS Classification	Soil Lithology/Characteristics
ATL-SB-071	0-0.5	ml	SILT, reddish brown, stiff/dense, rootlets, dry, no odor
ATL-SB-071	0.5-2	ml	SILT, reddish brown, loose, micaceous, trace clay, no odor, slightly damp
ATL-SB-071	2-4'	ml	SILT, loose-medium dense, micaceous, trace clay, no odor, slightly damp
ATL-SB-072	0-0.5	ml	SILT, reddish brown, loose, rootlets, dry, no odor, trace u. fine sands
ATL-SB-072	0.5-2	ml	SILT and SAND, very fine - coarse, trace coarse gravel, dark brown-black, trace SLAG material/cinders, dry, no odor.
ATL-SB-072	2-4	ml	SILT and SAND, very fine - coarse, trace coarse gravel, dark brown-black, trace SLAG material/cinders, dry, no odor.
ATL-SB-072	4-6	ml	clayey SILT, dark grey and brown, micaceous, low plasticity, sl. damp, no odor, soft-med. soft
ATL-SB-072	6-8	ml	clayey SILT, dark grey and brown, micaceous, low plasticity, soft-medium soft, sl. damp, no odor.
ATL-SB-073	0-0.5	ml	SILT, light brown-brown, dry, very loose, rootlets, trace fine-medium coarse gravel, no odor
ATL-SB-073	0.5-2	ml	SILT, light brown-brown, dry, very loose, rootlets, trace fine-medium coarse gravel, no odor, abundant gravel (f-c), rootlets, trace f-c grained samos, no odor, dry, micaceous
ATL-SB-073	2-4'	ml	reddish brown, stiff/dense, trace fine gravel, rootlets, dry, no odor, micaceous
ATL-SB-073	4-6'	ml	brown-reddish brown, stiff/dense, trace fine gravel, rootlets micaceous, dry, no odor
ATL-SB-073	6-8'	ml	SILT, brown, stiff, rootlets, no odor, dry
ATL-SB-074	0-0.5	ml	SILT, brown, very loose, trace fine gravel, dry, no odor
ATL-SB-074	0.5-2	ml	SILT, brown, very loose, trace fine gravel, medium stiff/dense, dry, no odor
ATL-SB-074	2-4'	ml	clayey SILT, reddish brown, low plasticity, micaceous, slightly damp, no odor
ATL-SB-075	0-0.5	ml	SILT, reddish brown, trace clay, trace coarse gravel, loose, damp, no odor
ATL-SB-075	0.5-2	ml	SILT, reddish brown, trace clay, trace coarse gravel, loose, damp, no odor
ATL-SB-075	2-4'	ml	clayey SILT, reddish brown, soft, low plasticity, micaceous, damp, no odor
ATL-SB-075	4-6'	ml	silty SAND, brown, trace clay, trace fines, trace fine gravel, loose, slightly damp, no odor
ATL-SB-076	0-0.5	ml	SILT, reddish brown, loose, trace clay, micaceous, dry, no odor
ATL-SB-076	0.5-2	ml	SILT, reddish brown, loose, trace clay, micaceous, rootlets, trace, fine gravel, no odor
ATL-SB-076	2-4'	ml	clayey SILT, dark reddish brown, loose, micaceous, slightly damp, no odor
ATL-SB-077	0-0.5	ml	SILT, reddish brown, loose, no plasticity, dry, rootlets, no odor.
ATL-SB-077	0.5-2	ml	SILT, reddish brown, loose, no plasticity, dry, rootlets, no odor.
ATL-SB-077	2-4'	ml	SILT, loose, no plasticity, rootlets, med. soft, dry, no odor, reddish brown-dark brown.
ATL-SB-077	4-6'	ml	SILT, trace clay, lt. grey and brown, very loose, micaceous, dry, no odor.
ATL-SB-078	0-0.5	ml	SILT, brown, loose, trace fine, rootlets, dry, no odor, trace coarse gravel.
ATL-SB-078	0.5-2	ml	SAA to lt. grey, clayey SILT, str. grey plasticity, sl. damp, no odor.
ATL-SB-078	2-4'	ml	SILT and clayey SILT, loose, sl. damp, low plasticity, no odor.
ATL-SB-078	4-6'	ml	clayey SILT, soft, brown, trace fines, moist to wet, no odor

Appendix A
Visual Soil Classifications
Site Delineation Report and Removal Action Work Plan
VCC-Atlanta, DeKalb County, Georgia

Soil Boring	Depth Interval (feet)	USCS Classification	Soil Lithology/Characteristics
ATL-SB-079	0-0.5	ml	SILT, brown, very loose, rootlets, trace fine gravel, dry, no odor, micaceous
ATL-SB-079	0.5-2	ml	SILT, brown, very loose, rootlets, trace fine gravel, micaceous, dry, no odor,
ATL-SB-079	2-4'	ml	SILT, brown, very loose, rootlets, trace fine gravel, micaceous, dry, no odor
ATL-SB-080	0-0.5	ml	SILT, reddish brown, trace clay, medium dense, micaceous, trace fine gravel, dry, no odor
ATL-SB-080	0.5-2	ml	SILT, reddish brown, trace clay, medium dense, micaceous, trace fine gravel, loose, dry, no odor
ATL-SB-080	2-4'	ml	SILT, reddish brown, trace clay, medium dense, micaceous, trace fine gravel, dry, no odor
ATL-SB-081	0-0.5	ml	SILT, brown, loose, trace fines, trace c-gravel, rootlets, dry, no odor
ATL-SB-081	0.5-2	ml	SILT, dark brown, loose, abundant gravel, trace cinder (charcoal) fragments, rootlets, dry, no odor
ATL-SB-081	2-4'	ml	clayey silt, reddish brown, micaceous, low plasticity, slightly damp, no odor
ATL-SB-082	0-0.5	ml	silty SAND, grey, trace clay, abundant gravel, loose, moist, no odor
ATL-SB-082	0.5-2	ml	clayey SILT, dark brown, micaceous, low plasticity, damp, no odor
ATL-SB-082	2-4'	ml	clayey SILT, dark brown, micaceous, low plasticity, damp, trace gravel, no odor
ATL-SB-083	0-0.5	ml	SILT, brown, loose, rootlets, trace gravel, dry, no odor
ATL-SB-083	0.5-2	ml	SILT, brown, loose, rootlets, abundant gravel, dry, no odor
ATL-SB-083	2-4'	ml	SILT, brown, stiff/dense, rootlets, dry no odor.
ATL-SB-084	0-0.5	ml	silty SAND, grey, fine-coarse, loose, trace gravel, moist, no odor
ATL-SB-084	0.5-2	ml	clayey SILT, reddish brown, stiff, micaceous, slightly damp, no odor, low plasticity
ATL-SB-084	2-4'	ml	clayey SILT, reddish brown, medium soft-stiff, slightly damp, no odor
ATL-SB-085	0-0.5	cl	silty CLAY, reddish brown, medium soft, medium plasticity, damp-moist, no odor, micaceous
ATL-SB-085	0.5-2	cl	silty CLAY, reddish brown, medium soft, medium plasticity, damp-moist, no odor, micaceous
ATL-SB-085	2-4'	cl	silty CLAY, reddish brown, medium soft, medium plasticity, damp-moist, no odor, micaceous
ATL-SB-086	0-0.5	ml	clayey SILT, reddish brown, micaceous, soft, slightly damp
ATL-SB-086	0.5-2	ml	clayey SILT, reddish brown, micaceous, soft, slightly damp
ATL-SB-086	2-4'	ml	clayey SILT, reddish brown, micaceous, soft, slightly damp
ATL-SB-087	0-0.5	ml	clayey SILT, dark brown, micaceous, soft, low plasticity, slightly damp, no odor
ATL-SB-087	0.5-2	ml	clayey SILT, dark brown, micaceous, soft, low plasticity, slightly damp, no odor
ATL-SB-087	2-4'	ml	SILT, brown, loose, trace clay, trace fine gravel, slightly damp, no odor
ATL-SB-088	0-0.5	ml	clayey SILT, grey, loose, micaceous, slightly damp, trace gravel, no odor
ATL-SB-088	0.5-2	ml	clayey SILT, grey, loose, micaceous, slightly damp, trace gravel, no odor
ATL-SB-088	2-4'	ml	clayey SILT, grey, loose, micaceous, slightly damp, trace gravel, no odor

Appendix A
Visual Soil Classifications
Site Delineation Report and Removal Action Work Plan
VCC-Atlanta, DeKalb County, Georgia

Soil Boring	Depth Interval (feet)	USCS Classification	Soil Lithology/Characteristics
ATL-SB-MW-04	0-0.5	ml	SILT, brown, stiff, rootlets, trace fines, no odor, dry.
ATL-SB-MW-04	0.5-2	ml	clayey SILT, brown, med. soft, trace fines, low plasticity, no odor, sl. damp.
ATL-SB-MW-04	2-4	ml	clayey SILT, light grey and brown, low plasticity, micaceous, no odor, sl. damp
ATL-SB-MW-04	2-4	ml	clayey SILT, light grey and brown, low plasticity, micaceous, no odor, sl. damp
ATL-SB-MW-05	0-0.5	ml	SILT, reddish brown, loose-stiff, rootlets, dry, micaceous, no odor, NO SLAG.
ATL-SB-MW-05	0.5-2	ml	SILT, reddish brown, no odor, dry, NO SLAG. (SAA)
ATL-SB-MW-05	2-4'	ml	clayey SILT, reddish brown, micaceous, med. soft-stiff, dry, no odor, NO SLAG.
ATL-SB-MW-05	4-6'	ml	clayey SILT, reddish brown, micaceous, med. soft, sl. damp, no odor, med. plasticity
ATL-SB-MW-05	6-8'	ml	clayey SILT, reddish brown, trace fine gravel, minor black staining, sl. damp, no odor
ATL-SB-MW-05	8-10'	ml	clayey SILT, reddish brown, black staining, trace SLAG, micaceous, sl. damp, med. soft, no odor
ATL-SB-MW-05	10-12'	ml	clayey SILT, reddish brown, no SLAG observed, sl. damp, no odor.
ATL-SB-MW-05	12-14	ml	reddish brown clayey SILT to light brown sandy clay, soft- med. soft, black staining on clayey silt only, micaceous, sl. damp, no odor
ATL-SB-MW-05	12-14	ml	reddish brown clayey SILT to light brown sandy clay, soft- med. soft, black staining on clayey silt only, micaceous, sl. damp, no odor
ATL-SB-MW-06	0-0.5	ml	SILT, reddish brown, loose, trace coarse gravel, dry, no odor, micaceous
ATL-SB-MW-06	0.5-2	ml	SILT, reddish brown, dry, no odor, micaceous (SAA)
ATL-SB-MW-06	2-4'	ml	SILT, dark reddish brown, loose, trace coarse gravel, micaceous, dry, no odor
ATL-SB-MW-06	4-6'	ml	SILT, dark reddish brown, increased clay content, slightly damp, no odor.
ATL-SB-MW-06	6-8'	ml	clayey SILT, soft, low plasticity, micaceous, slightly damp, no odor
ATL-SB-MW-06	8-10'	ml	clayey SILT, soft, low plasticity, micaceous, slightly damp, no odor

ARCADIS

Appendix B

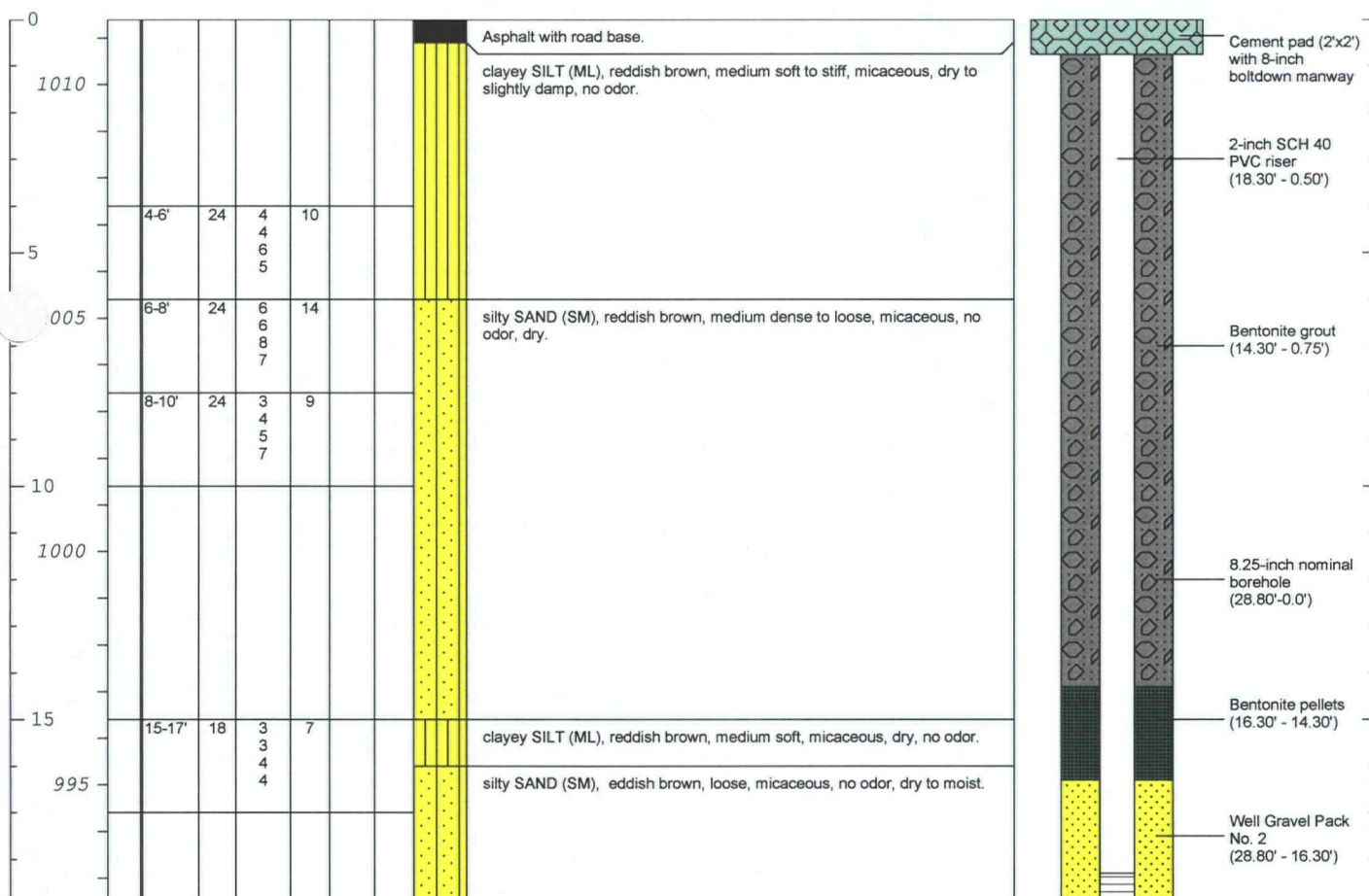
Monitoring Well Construction Log

Date Start/Finish: 9-27-06 / 9-29-06
Drilling Company: EEL, Inc.
Driller's Name: Eddie Fuller
Drilling Method: Hollow Stem Auger
Bit Size: NA
Auger Size: 4.25-inch I.D.
Rig Type: CME
Sampling Method: 24-inch splitspoon

Northing: 1367516.585
Easting: 2246227.465
Casing Elevation: 1010.90 ft amsl
Borehole Depth: 30.0 ft bgs
Surface Elevation: 1011.40 ft amsl
Logged by: Mark Davidson

Well/Boring ID: ATL-MW-01
Client: Exxon Mobil Corporation
Location: VCC- Atlanta
 Dekalb County, GA

DEPTH	ELEVATION	SPT Interval (ft bgs)	Recovery (inches)	Blow Counts	N-Value	Geologic Column	Stratigraphic Description	Well/Boring Construction
-------	-----------	-----------------------	-------------------	-------------	---------	-----------------	---------------------------	--------------------------



BBL[®]
BLASLAND, BOUCK & LEE, INC.
 engineers, scientists, economists

Remarks:
 NA: Not Applicable.
 ft bgs: feet below ground surface.
 ft btoc: feet below top of casing.
 ft amsl: feet above mean sea level.

Water Level Data		
Date	Depth	Elev.
10/11/06	20.99	989.91
Depth measured from top of casing*		

Date Start/Finish: 9-27-06 / 9-29-06
Drilling Company: EEI, Inc.
Driller's Name: Eddie Fuller
Drilling Method: Hollow Stem Auger
Bit Size: NA
Auger Size: 4.25-inch I.D.
Rig Type: CME
Sampling Method: 24-inch splitspoon

Northing: 1367516.585
Easting: 2246227.465
Casing Elevation: 1010.90 ft amsl

Borehole Depth: 30.0 ft bgs
Surface Elevation: 1011.40 ft amsl

Logged by: Mark Davidson

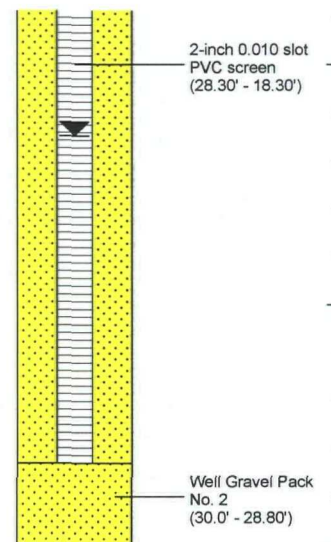
Well/Boring ID: ATL-MW-01

Client: Exxon Mobil Corporation

Location: VCC- Atlanta
 Dekalb County, GA

DEPTH	ELEVATION	SPT Interval (ft bgs)	Recovery (inches)	Blow Counts	N-Value			Geologic Column	Stratigraphic Description	Well/Boring Construction
-------	-----------	-----------------------	-------------------	-------------	---------	--	--	-----------------	---------------------------	--------------------------

20		20-22'	17	3 3 4 5	7				silty SAND (SM), white, mottled gold, loose, micaceous, no odor, saturated.	
990										
25										
985		26-28'	17	5 6 8 9	14				silty SAND (SM), light brown, mottled black/white, loose, micaceous, no odor, saturated.	
		28-30'	10	8 10 13 11	23					
30									Boring terminated at 30.0 ft bgs	



BBL[®]
BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

Remarks:
 NA: Not Applicable.
 ft bgs: feet below ground surface.
 ft btoc: feet below top of casing.
 ft amsl: feet above mean sea level.

Water Level Data		
Date	Depth	Elev.
10/11/06	20.99	989.91
Depth measured from top of casing*		

Date Start/Finish: 9-28-06 / 9-29-06
Drilling Company: EEI, Inc.
Driller's Name: Eddie Fuller
Drilling Method: Hollow Stem Auger
Bit Size: NA
Auger Size: 4.25-inch I.D.
Rig Type: CME
Sampling Method: 24-inch splitspoon

Northing: 1367577.741
Easting: 2245735.4
Casing Elevation: 1003.7 ft amsl

Borehole Depth: 30.0 ft bgs
Surface Elevation: 1004.0 ft amsl

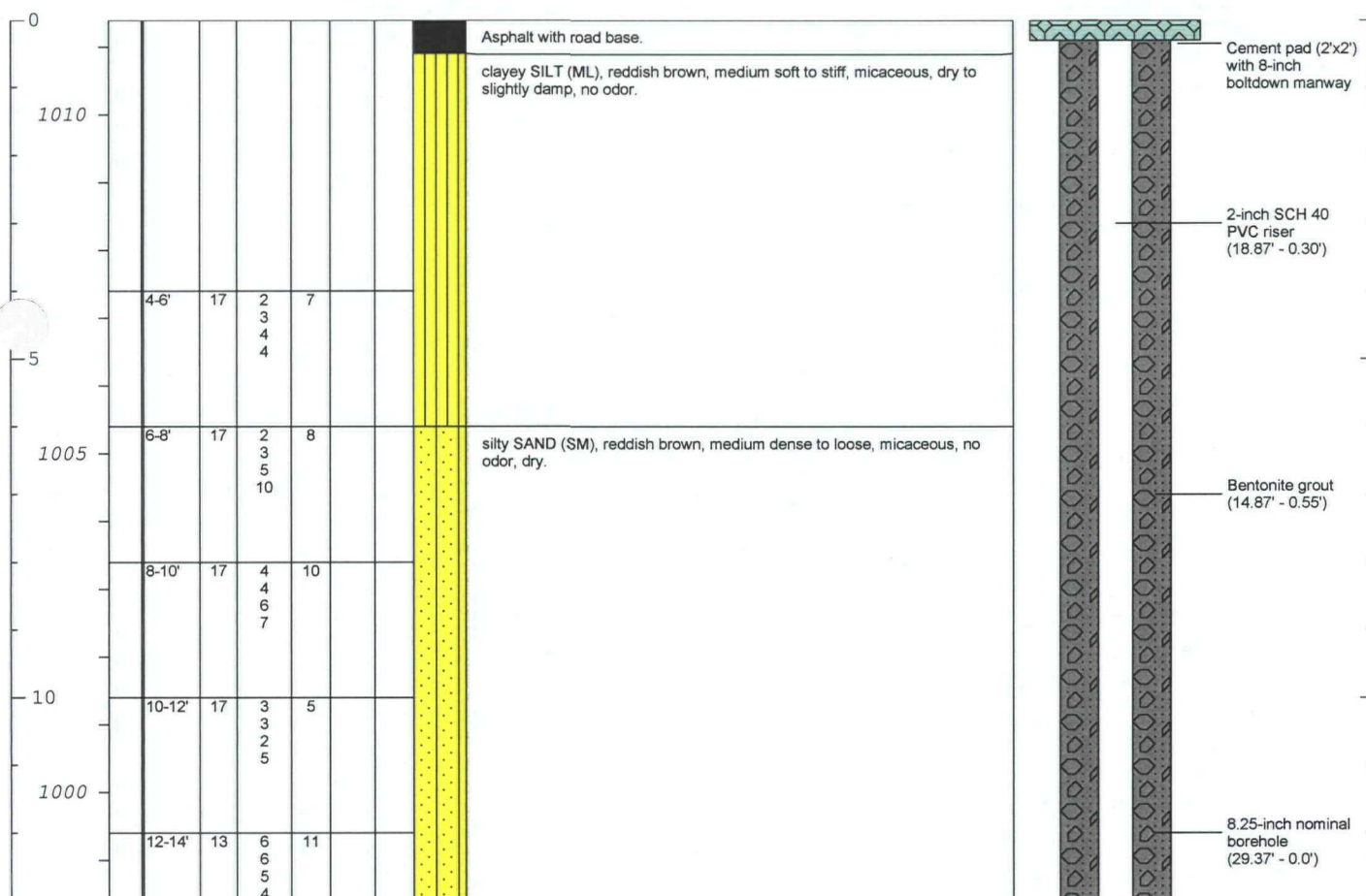
Logged by: Mark Davidson

Well/Boring ID: ATL-MW-02

Client: Exxon Mobil Corporation

Location: VCC- Atlanta
 Dekalb County, GA

DEPTH	ELEVATION	SPT Interval (ft bgs)	Recovery (inches)	Blow Counts	N-Value	Geologic Column	Stratigraphic Description	Well/Boring Construction
-------	-----------	-----------------------	-------------------	-------------	---------	-----------------	---------------------------	--------------------------



BBL[®]
 BLASLAND, BOUCK & LEE, INC.
 engineers, scientists, economists

Remarks:
 NA: Not Applicable.
 ft bgs: feet below ground surface.
 ft btoc: feet below top of casing.
 ft amsl: feet above mean sea level.

Water Level Data

Date	Depth	Elev.
10/11/06	24.16	979.54

Depth measured from top of casing*

Date Start/Finish: 9-28-06 / 9-29-06
Drilling Company: EEI, Inc.
Driller's Name: Eddie Fuller
Drilling Method: Hollow Stem Auger
Bit Size: NA
Auger Size: 4.25-inch I.D.
Rig Type: CME
Sampling Method: 24-inch splitspoon

Northing: 1367577.741
Easting: 2245735.4
Casing Elevation: 1003.7 ft amsl

Borehole Depth: 30.0 ft bgs
Surface Elevation: 1004.0 ft amsl

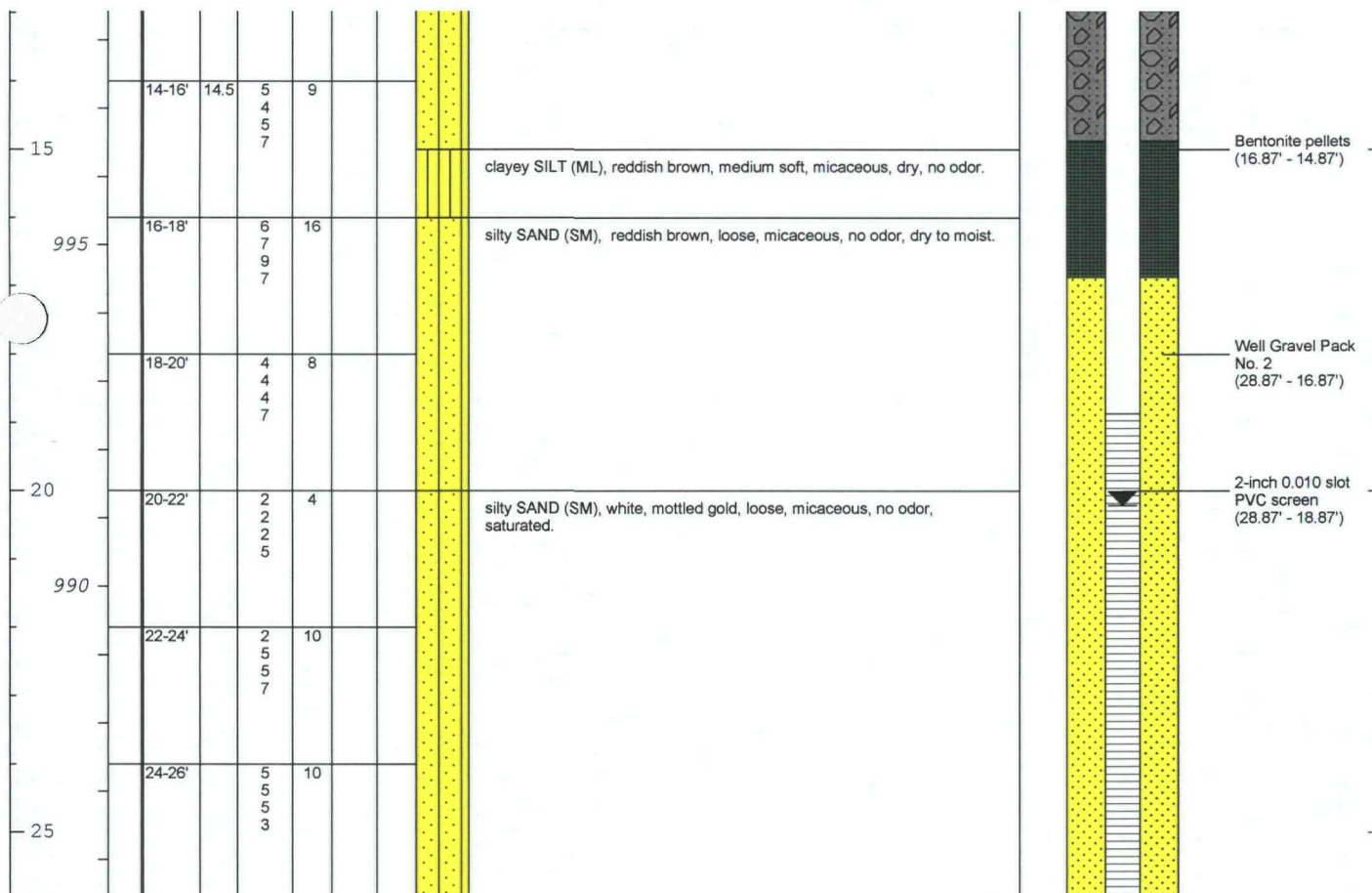
Logged by: Mark Davidson

Well/Boring ID: ATL-MW-02

Client: Exxon Mobil Corporation

Location: VCC- Atlanta
 Dekalb County, GA

DEPTH	ELEVATION	SPT Interval (ft bgs)	Recovery (inches)	Blow Counts	N-Value	Geologic Column	Stratigraphic Description	Well/Boring Construction
-------	-----------	-----------------------	-------------------	-------------	---------	-----------------	---------------------------	--------------------------



BBL®
BLASLAND, BOUCK & LEE, INC.
 engineers, scientists, economists

Remarks:
 NA: Not Applicable.
 ft bgs: feet below ground surface.
 ft btoc: feet below top of casing.
 ft amsl: feet above mean sea level.

Water Level Data

Date	Depth	Elev.
10/11/06	24.16	979.54

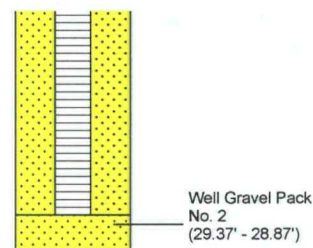
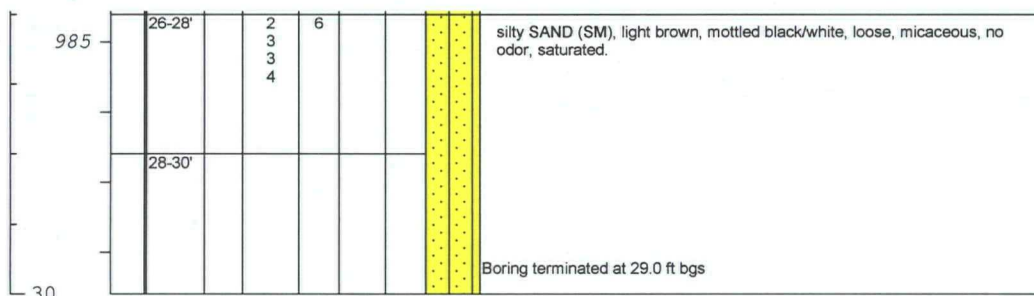
Depth measured from top of casing*


Date Start/Finish: 9-28-06 / 9-29-06 Drilling Company: EEI, Inc. Driller's Name: Eddie Fuller Drilling Method: Hollow Stem Auger Bit Size: NA Auger Size: 4.25-inch I.D. Rig Type: CME Sampling Method: 24-inch splitspoon	Northing: 1367577.741 Easting: 2245735.4 Casing Elevation: 1003.7 ft amsl Borehole Depth: 30.0 ft bgs Surface Elevation: 1004.0 ft amsl Logged by: Mark Davidson	Well/Boring ID: ATL-MW-02 Client: Exxon Mobil Corporation Location: VCC- Atlanta Dekalb County, GA
---	---	--

Northings: 1367577.741
Easting: 2245735.4
Casing Elevation: 1003.7 ft amsl
Borehole Depth: 30.0 ft bgs
Surface Elevation: 1004.0 ft amsl
Logged by: Mark Davidson

Well/Boring ID: ATL-MW-02
Client: Exxon Mobil Corporation
Location: VCC- Atlanta
Dekalb County, GA

DEPTH	ELEVATION	SPT Interval (ft bgs)	Recovery (inches)	Blow Counts	N-Value	Geologic Column	Stratigraphic Description	Well/Boring Construction
-------	-----------	-----------------------	-------------------	-------------	---------	-----------------	---------------------------	--------------------------



 <p>BBL[®] <u>BLASLAND, BOUCK & LEE, INC.</u> <i>engineers, scientists, economists</i></p>	<p>Remarks: NA: Not Applicable. ft bgs: feet below ground surface. ft btoc: feet below top of casing. ft amsl: feet above mean sea level.</p>	<p>Water Level Data</p> <table border="1"> <thead> <tr> <th>Date</th><th>Depth</th><th>Elev.</th></tr> </thead> <tbody> <tr> <td>10/11/06</td><td>24.16</td><td>979.54</td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table> <p>Depth measured from top of casing*</p>	Date	Depth	Elev.	10/11/06	24.16	979.54									
Date	Depth	Elev.															
10/11/06	24.16	979.54															

Date Start/Finish: 9-28-06 / 9-29-06
Drilling Company: EEI, Inc.
Driller's Name:
Drilling Method: Hollow Stem Auger
Bit Size: NA
Auger Size: 4.25-inch I.D.
Rig Type: CME
Sampling Method: 24-inch splitspoon

Northing: 1367918.146
Easting: 2246782.144
Casing Elevation: 1023.90 ft amsl

Borehole Depth: 29.5 ft bgs
Surface Elevation: 1023.70 ft amsl

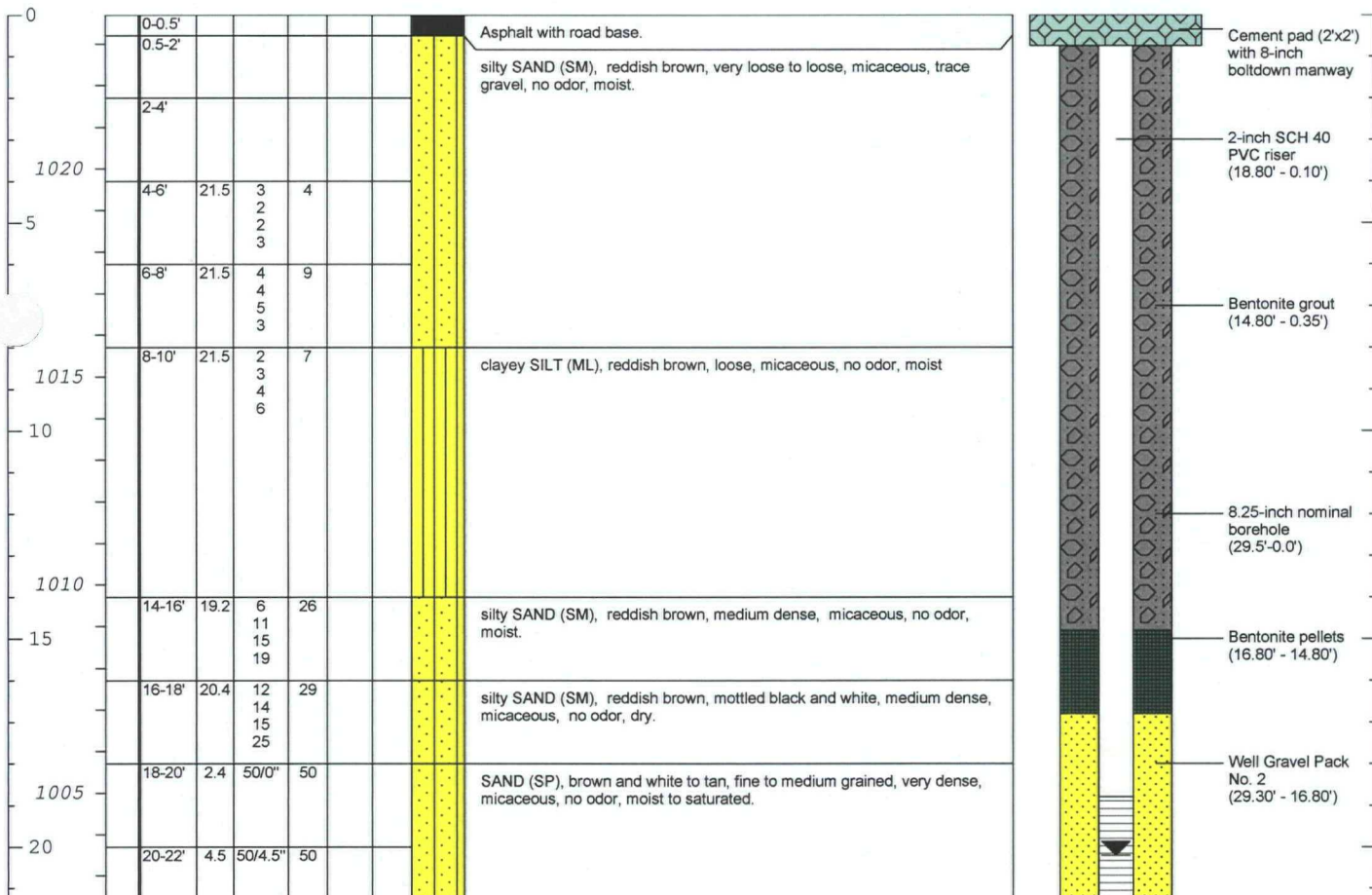
Logged by: Mark Davidson

Well/Boring ID: ATL-MW-03

Client: Exxon Mobil Corporation

Location: VCC- Atlanta
 Dekalb County, GA

DEPTH	ELEVATION	SPT Interval (ft bgs)	Recovery (inches)	Blow Counts	N-Value	Geologic Column	Stratigraphic Description	Well/Boring Construction
-------	-----------	-----------------------	-------------------	-------------	---------	-----------------	---------------------------	--------------------------



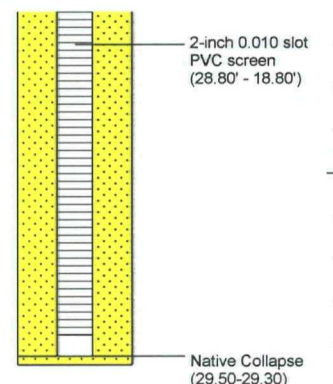
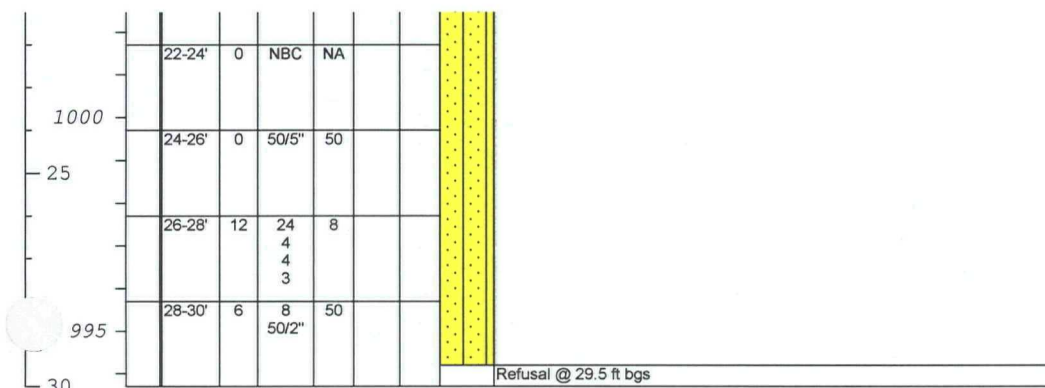
BBL[®]
BLASLAND, BOUCK & LEE, INC.
 engineers, scientists, economists

Remarks:
 NA: Not Applicable.
 ft bgs: feet below ground surface.
 ft btoc: feet below top of casing.
 ft amsl: feet above mean sea level.
 NBC: No blow counts; could not advance splitspoon.

Water Level Data		
Date	Depth	Elev.
10/11/06	20.11	1003.49
Depth measured from top of casing*		

Date Start/Finish: 9-28-06 / 9-29-06 Drilling Company: EEI, Inc. Driller's Name: Drilling Method: Hollow Stem Auger Bit Size: NA Auger Size: 4.25-inch I.D. Rig Type: CME Sampling Method: 24-inch splitspoon	Northing: 1367918.146 Easting: 2246782.144 Casing Elevation: 1023.90 ft amsl Borehole Depth: 29.5 ft bgs Surface Elevation: 1023.70 ft amsl Logged by: Mark Davidson	Well/Boring ID: ATL-MW-03 Client: Exxon Mobil Corporation Location: VCC- Atlanta Dekalb County, GA
--	---	--

DEPTH	ELEVATION	SPT Interval (ft bgs)	Recovery (inches)	Blow Counts	N-Value	Geologic Column	Stratigraphic Description	Well/Boring Construction
-------	-----------	-----------------------	-------------------	-------------	---------	-----------------	---------------------------	--------------------------



	Remarks: NA: Not Applicable. ft bgs: feet below ground surface. ft btoc: feet below top of casing. ft amsl: feet above mean sea level. NBC: No blow counts; could not advance splitspoon.	Water Level Data		
		Date	Depth	Elev.
		10/11/06	20.11	1003.49
Depth measured from top of casing*				

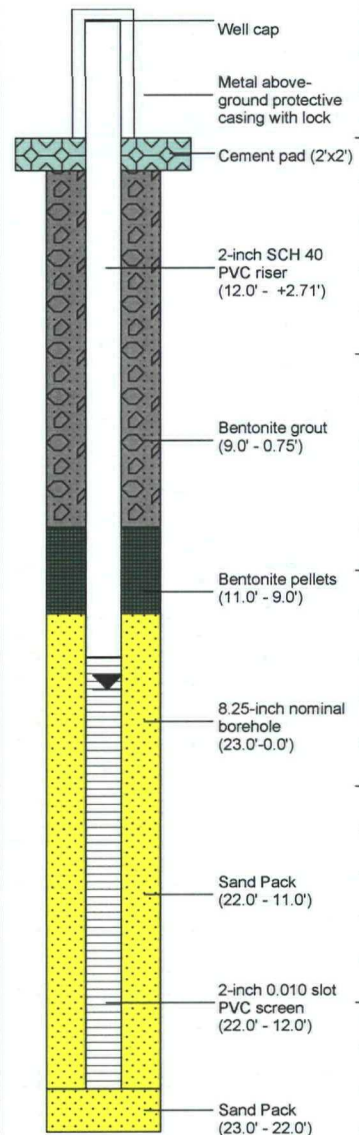
Date Start/Finish: 6-10-08 / 6-10-08
Drilling Company: EEI, Inc.
Driller's Name: David Nalls
Drilling Method: Hollow Stem Auger
Auger Size: 4.25-inch I.D.
Rig Type: CME
Sampling Method: 24-inch splitspoon

Northing: 1367810.33
Easting: 2245448.94
Casing Elevation: 990.09 ft amsl
Borehole Depth: 23.0 ft bgs
Surface Elevation: 987.38 ft amsl
Descriptions By: Brian Wilson

Well/Boring ID: ATL-MW-04
Client: Exxon Mobil Corporation
Location: VCC- Atlanta
 DeKalb County, GA

DEPTH	ELEVATION	Sample Interval (ft bgs)	Recovery (inches)	Blow Counts	N - Value	Geologic Column	Stratigraphic Description	Well/Boring Construction
-------	-----------	--------------------------	-------------------	-------------	-----------	-----------------	---------------------------	--------------------------

990								
0							clayey SILT (ML), reddish brown, medium soft to stiff, micaceous, roots, dry, no odor.	
985							silty SAND (SM), reddish brown to gray, loose, micaceous, no odor, dry to moist.	
5	4-6'	12	WT WT WT 4	WT				
980	6-8'	24	4 4 5 5	9				
10	8-10'	24	WT 1 1 2	2			silty SAND (SM), black to brown, loose, micaceous, no odor, moist.	
975	10-12'	18	1 2 2 1	4			silty SAND (SM), reddish brown to gray, medium dense, micaceous, no odor, moist.	
15	15-17'	24	1 2 3 1	5			clayey SILT (ML), orange-brown, medium soft, moist, no odor.	
970	17-19'	24	2 1 1 1	2			silty SAND (SM), reddish brown to gray, medium dense, micaceous, no odor, moist to wet.	
20	19-21'	24	1 1 2 3	3			silty SAND (SM), gray to brown, loose, micaceous, no odor, wet.	
965	21-23'	24	2 2 1 3	3				
							Boring terminated at 23.0 ft bgs	



Remarks: NA: Not Applicable.
 ft bgs: feet below ground surface.
 ft amsl: feet above mean sea level.
 WT: only weight of hammer used to advance split-spoon, no blow counts available.
 Borehole cleared for utilities from ground surface to 4 ft bgs via post-hole method.

Water Level Data

Date	Depth	Elev.
6/27/08	12.76	977.33

Depth measured from top of casing*

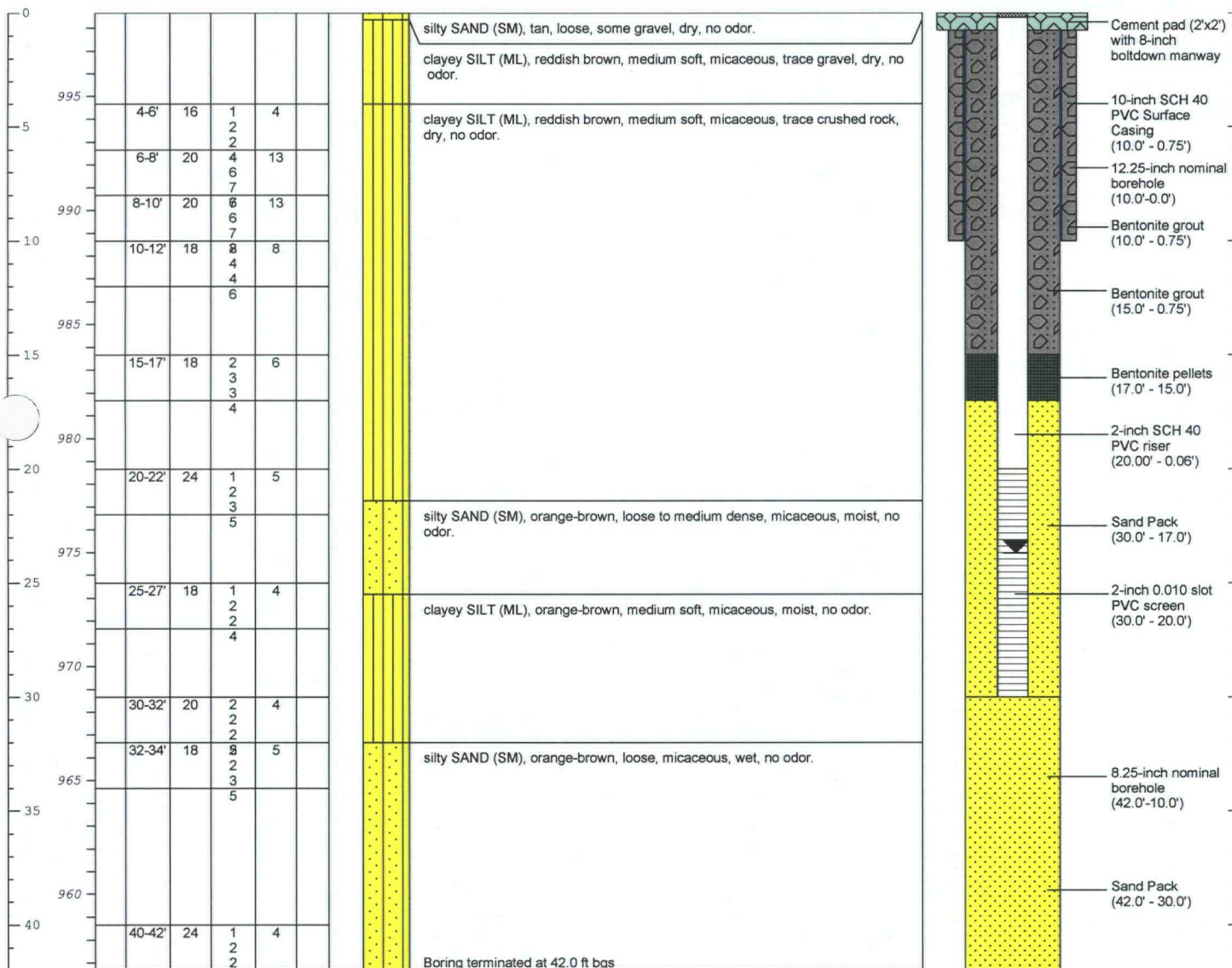
Well/Boring ID: ATL-MW-05
Client: Exxon Mobil Corporation
Location: VCC- Atlanta
DeKalb County, GA

Date Start/Finish: 6-11-08 / 6-12-08
Drilling Company: EEI, Inc.
Driller's Name: David Nalls
Drilling Method: Hollow Stem Auger
Auger Size: 4.25-inch I.D./12.25-inch I.D.
Rig Type: CME
Sampling Method: 24-inch splitspoon

Northing: 1367340.49
Easting: 2245776.41
Casing Elevation: 998.60 ft amsl
Borehole Depth: 42.0 ft bgs
Surface Elevation: 998.66 ft amsl
Descriptions By: Brian Wilson

Well/Boring ID: ATL-MW-06
Client: Exxon Mobil Corporation
Location: VCC- Atlanta
 DeKalb County, GA

DEPTH	ELEVATION	Sample Interval (ft bgs)	Recovery (inches)	Blow Counts	N - Value	Geologic Column	Stratigraphic Description	Well/Boring Construction
-------	-----------	--------------------------	-------------------	-------------	-----------	-----------------	---------------------------	--------------------------



Remarks: NA: Not Applicable.
 ft bgs: feet below ground surface.
 ft amsl: feet above mean sea level.
 Borehole cleared for utilities from ground surface to 4 ft bgs via post-hole method.

Water Level Data

Date	Depth	Elev.
6/27/08	23.70	974.90
Depth measured from top of casing*		

ARCADIS

Appendix C

Waste Manifests



HAZ~MAT

TRANSPORTATION AND DISPOSAL
P.O. BOX 37392 • CHARLOTTE, N.C. 28237
(704) 332-5600
FAX (704) 375-7183

Manifest No. 30943
P.O. No. _____
Job No. _____

NON-HAZARDOUS SPECIAL WASTE

Section I. GENERATOR (Generator complete all of Section I)

GENERATOR LOCATION		WORK CONTRACTED BY	
AME <u>EXXON MOBIL OIL COMPANY</u>		Bill To (If different from information at left)	
ORIGINATING ADDRESS <u>10000 Dalton Avenue</u>		NAME <u>EXXON</u>	
MAILING ADDRESS _____		ADDRESS <u>10000 Dalton Avenue</u>	
CITY <u>Charlotte</u>	STATE <u>NC</u>	CITY <u>Charlotte</u>	STATE <u>NC</u>
ZIP <u>28206</u>		ZIP <u>28206</u>	
PHONE NO. <u>704-332-5600</u>		PHONE NO. <u>704-332-5600</u>	
CONTACT NAME <u>John Block</u>		CONTACT NAME <u>John Block</u>	
ES. OF WASTE: <u>Non-Hazardous Special Waste</u>		No. <input type="checkbox"/> Type <input type="checkbox"/> Units <input type="checkbox"/> Quantity <input type="checkbox"/>	

Section II. INVOICE INFORMATION

DESCRIPTION	QUANTITY	LINE TOTAL
1. PETROLEUM CONTACT WATER PUMPED FROM TANKS, DRUMS OR AFVR		
2. OFF-SPEC LIGHT OIL, DIESEL OR GAS PUMPED FROM TANKS OR DRUMS		
3. SOLUBLE OILS OR COOLANTS PUMPED FROM STORAGE		
4. SEDIMENT OR SOLIDS VACUUMED FROM CONTAINMENT AREA		
5. 55-GALLON DRUM REMOVED - SOLID OR EMPTY <u>500 LBS</u>		
6. 55-GALLON DRUM REMOVED - LIQUID <u>500 LBS</u>		
7. <u>500 LBS</u>		
8. <u>500 LBS</u>		
9. <u>500 LBS</u>		
10. <u>500 LBS</u>		
11. <u>500 LBS</u>		
12. <u>500 LBS</u>		
13. <u>500 LBS</u>		
14. <u>500 LBS</u>		
15. <u>500 LBS</u>		
16. <u>500 LBS</u>		
17. <u>500 LBS</u>		
18. <u>500 LBS</u>		
19. <u>500 LBS</u>		
20. <u>500 LBS</u>		
21. <u>500 LBS</u>		
22. <u>500 LBS</u>		
23. <u>500 LBS</u>		
24. <u>500 LBS</u>		
25. <u>500 LBS</u>		
26. <u>500 LBS</u>		
27. <u>500 LBS</u>		
28. <u>500 LBS</u>		
29. <u>500 LBS</u>		
30. <u>500 LBS</u>		
31. <u>500 LBS</u>		
32. <u>500 LBS</u>		
33. <u>500 LBS</u>		
34. <u>500 LBS</u>		
35. <u>500 LBS</u>		
36. <u>500 LBS</u>		
37. <u>500 LBS</u>		
38. <u>500 LBS</u>		
39. <u>500 LBS</u>		
40. <u>500 LBS</u>		
41. <u>500 LBS</u>		
42. <u>500 LBS</u>		
43. <u>500 LBS</u>		
44. <u>500 LBS</u>		
45. <u>500 LBS</u>		
46. <u>500 LBS</u>		
47. <u>500 LBS</u>		
48. <u>500 LBS</u>		
49. <u>500 LBS</u>		
50. <u>500 LBS</u>		

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

Generator Authorized Agent Name John Block Signature John Block Shipment Date 10/27/06

Section III. TRANSPORTER

HAZ~MAT

TRANSPORTATION AND DISPOSAL
P.O. BOX 37392 • CHARLOTTE, N.C. 28237

Driver Name/Title John Block
Phone No. 704-332-5600 c. Truck No. 1000
Hazardous Waste Transporter Permits
PA NCR 000003186
PA NCD048461370
Driver Signature John Block Shipment Date 10/27/06

TRANSPORTER II

e. Name _____
f. Address _____
g. Driver Name/Title _____
h. Phone No. _____ i. Truck No. _____
j. Transporter II Permit Nos. _____
Driver Signature _____ Shipment Date _____

Section IV. FACILITY INFORMATION AND CERTIFICATE OF DISPOSAL

Facility Name: Haz-Mat Transportation & Disposal, Inc. a. Phone No. 704-332-5600
Physical Address: 210 Dalton Avenue b. Mailing Address: P.O. Box 37392
Charlotte, N.C. 28206 Charlotte, N.C. 28237

Waste Indication Space
It is to be certified that all non-hazardous material removed from above location has been received and will be disposed of in accordance with applicable local, state and federal regulations in the following manner: (1) Petroleum products are blended into a beneficial reusable fuel for use in large industrial burners. (2) Waste waters are to be treated with polymers, pH adjusters, and a flocculant, then flows through a dissolved air flotation system for pretreatment separation and into the CMUD sanitation sewer system under permit IUP#5012. (3) Sludges from treatment systems are hauled to E.P.A. approved facilities for proper disposal. Manifest and certificate of disposal are on file. Our treatment system operates on a first in, first out basis and product should be processed within seven days.

SIGNATURE OF FACILITY AGENT _____ DATE _____ MONTH _____ DAY _____ YEAR _____



HAZ~MAT

TRANSPORTATION AND DISPOSAL
P.O. BOX 37392 • CHARLOTTE, N.C. 28237
(704) 332-5600
FAX (704) 375-7183

Manifest No. 32599
P.O. No. _____
Job No. 08
1

NON-HAZARDOUS SPECIAL WASTE

Section I. GENERATOR (Generator complete all of Section I)

GENERATOR LOCATION

NAME Archie
ORIGINATING ADDRESS 1100 Academy Plaza Suite 105 W Tower
MAILING ADDRESS _____
CITY Atlanta STATE GA ZIP _____
PHONE NO. 404-521-0000
CONTACT NAME Walt Johnson
DES. OF WASTE: Non-hazardous only liquids and solids

WORK CONTRACTED BY

Bill To (If different from information at left)

NAME Archie
ADDRESS 1100 Academy Plaza Suite 105 W Tower
CITY Atlanta STATE GA ZIP 30318
PHONE NO. _____
CONTACT NAME _____

No.	Type	Units	Quantity

Section II. INVOICE INFORMATION GALLONS DRUMS

DESCRIPTION	QUANTITY	LINE TOTAL
1. PETROLEUM CONTACT WATER PUMPED FROM TANKS, DRUMS OR AFVR		
2. OFF-SPEC LIGHT OIL, DIESEL OR GAS PUMPED FROM TANKS OR DRUMS		
3. SOLUBLE OILS OR COOLANTS PUMPED FROM STORAGE		
4. SEDIMENT OR SOLIDS VACUUMED FROM CONTAINMENT AREA		
5. 55-GALLON DRUM REMOVED - <u>SOLID</u> OR EMPTY <u>PPE</u>	<u>1</u>	
6. 55-GALLON DRUM REMOVED - <u>LIQUID</u> <u>PURE WATER</u>	<u>1</u>	
7.		
8.		
9.		
10. ARRIVAL TIME: _____ DEPARTURE TIME: <u>DIS</u>		

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

Generator Authorized Agent Name Walt Johnson Signature Walt Johnson Shipment Date 071208

Section III. TRANSPORTER (Generator complete a-d; Transporter I complete e-g; Transporter II complete h-n)

HAZ~MAT

TRANSPORTATION AND DISPOSAL
P.O. BOX 37392 • CHARLOTTE, N.C. 28237

TRANSPORTER II

a. Driver Name/Title _____
b. Phone No. _____ c. Truck No. 101

Hazardous Waste Transporter Permits
EPA NCR 000003186
EPA NCD048461370

Driver Signature _____ Shipment Date _____

e. Name _____
f. Address _____
g. Driver Name/Title _____
h. Phone No. _____ i. Truck No. _____
j. Transporter II Permit Nos. _____

Driver Signature _____ Shipment Date _____

Section IV. FACILITY INFORMATION AND CERTIFICATE OF DISPOSAL

Site Name: Haz-Mat Transportation & Disposal, Inc.
Physical Address: 210 Dalton Avenue
Charlotte, N.C. 28206

a. Phone No. 704-332-5600
b. Mailing Address: P.O. Box 37392
Charlotte, N.C. 28237

Waste Description Indication Space
This is to certify that all non-hazardous material removed from above location has been received and will be disposed of in accordance with applicable local, state and federal regulations in the following manner: (1) Petroleum products are blended into a beneficial reusable fuel for use in large industrial burners. (2) Waste waters are to be treated with polymers, pH adjusters, and a flocculant, then flows through a dissolved air flotation system for pretreatment separation, then into the CMUD sanitation sewer system under permit IUP#5012. (3) Sludges from treatment systems are hauled to E.P.A. approved facilities for proper disposal. Manifest and certificate of disposal are on file. (4) Our treatment system operates on a first in, first out basis and product should be processed within seven days.

SIGNATURE OF FACILITY AGENT _____ DATE _____ MONTH _____ DAY _____ YEAR _____



HAZ~MAT

TRANSPORTATION AND DISPOSAL
P.O. BOX 37392 • CHARLOTTE, N.C. 28237
(704) 332-5600
FAX (704) 375-7183

Manifest No. 34814

P.O. No. _____

Job No. 07-5493

13593

NON-HAZARDOUS SPECIAL WASTE

Section I.

GENERATOR (Generator complete all of Section I)

GENERATOR LOCATION

NAME Exxon Mobil Oil Corp ROSOS
ORIGINATING ADDRESS 200 Arizona Ave NE
MAILING ADDRESS _____
CITY Atlanta STATE GA ZIP 30307
PHONE NO. 678 446 8418
CONTACT NAME Ben Black
DES. OF WASTE: Non DOT Regulated material

WORK CONTRACTED BY

Bill To (If different from information at left)

NAME Arcadis BR SK 205
ADDRESS 11000 Regency Parkway West Tower
CITY Cary STATE NC ZIP 27518
PHONE NO. 919 415 2280
CONTACT NAME Carmen Chwalicki / Performance

No.	Type	Units	Quantity

Section II. INVOICE INFORMATION

GALLONS DRUMS

DESCRIPTION	QUANTITY	LINE TOTAL
1. PETROLEUM CONTACT WATER PUMPED FROM TANKS, DRUMS OR AFVR		
2. OFF-SPEC LIGHT OIL, DIESEL OR GAS PUMPED FROM TANKS OR DRUMS		
3. SOLUBLE OILS OR COOLANTS PUMPED FROM STORAGE		
4. SEDIMENT OR SOLIDS VACUUMED FROM CONTAINMENT AREA		
5. 55-GALLON DRUM REMOVED - SOLID OR EMPTY		
6. 55-GALLON DRUM REMOVED <u>LIQUID</u> <u>Purge water</u> <u>IDM</u>	<u>1</u>	
7.		
8.		
9.		
ARRIVAL TIME:	DEPARTURE TIME:	

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

CLEMENT QUARTER-PAPAHU ON BEHALF OF EXXONMOBIL

Generator Authorized Agent Name

Signature

Shipment Date

110207

Section III. TRANSPORTER

TRANSPORTER (Generator complete a-d; Transporter I complete e-g; Transporter II complete h-j)

HAZ~MAT

TRANSPORTATION AND DISPOSAL
P.O. BOX 37392 • CHARLOTTE, N.C. 28237

TRANSPORTER II

a. Driver Name/Title William White Driver
b. Phone No. 704-332-5600 c. Truck No. S 35

Hazardous Waste Transporter Permits
EPA NCR 000003186
EPA NCD048461370

d. William White 110207
Driver Signature Shipment Date

e. Name _____

f. Address _____

g. Driver Name/Title _____

h. Phone No. _____ i. Truck No. _____

j. Transporter II Permit Nos. _____

Driver Signature

Shipment Date

110207

Section IV.

FACILITY INFORMATION AND CERTIFICATE OF DISPOSAL

Site Name: Haz-Mat Transportation & Disposal, Inc.
Physical Address: 210 Dalton Avenue
Charlotte, N.C. 28206

a. Phone No. 704-332-5600
b. Mailing Address: P.O. Box 37392
Charlotte, N.C. 28237

Discrepancy Indication Space

I certify that all non-hazardous material removed from above location has been received and will be disposed of in accordance with applicable local, state and federal regulations in the following manner: (1) Petroleum products are blended into a beneficial reusable fuel for use in large industrial burners. (2) Waste waters are to be treated with polymers, pH adjusters, and a flocculant, then flows through a dissolved air flotation system for pretreatment separation then into the CMUD sanitation sewer system under permit IUP#5012. (3) Sludges from treatment systems are hauled to E.P.A. approved facilities for proper disposal. Manifest and certificate of disposal are on file. (4) Our treatment system operates on a first in, first out basis and product should be processed within seven days.

SIGNATURE OF FACILITY AGENT

DATE

MONTH 11

DAY 2

YEAR 07

ORIGINAL - FINAL T.S.D. • YELLOW - DISPOSER • PINK - 1ST T.S.D. • GOLD - GENERATOR



HAZ-MAT

TRANSPORTATION AND DISPOSAL
P.O. BOX 37392 • CHARLOTTE, N.C. 28237
(704) 332-5600
FAX (704) 375-7183

Manifest No. 38381
P.O. No. _____
Job No. 08-4308
16438

NON-HAZARDOUS SPECIAL WASTE

Section I. GENERATOR (Generator complete all of Section I)									
GENERATOR LOCATION									
NAME <u>ExxonMobil</u>	WORK CONTRACTED BY <u>Arcadis</u>								
ORIGINATING ADDRESS <u>1631 LaFrance St.</u>	Bill To (If different from information at left)								
MAILING ADDRESS _____	NAME <u>Arcadis</u>								
CITY <u>Atlanta</u> STATE <u>SC</u> ZIP _____	ADDRESS <u>11000 Regency Pkwy Suite 205 W Tower</u>								
PHONE NO. <u>919-415-2289</u>	CITY <u>Cary</u> STATE <u>NC</u> ZIP <u>27518</u>								
CONTACT NAME <u>Dan Peterman</u>	PHONE NO. _____								
ES. OF WASTE: <u>Non hazardous Liquids and Solids</u>	CONTACT NAME _____								
<table border="1"><tr><td>No.</td><td>Type</td><td>Units</td><td>Quantity</td></tr><tr><td></td><td></td><td></td><td></td></tr></table>		No.	Type	Units	Quantity				
No.	Type	Units	Quantity						

Section II. INVOICE INFORMATION		GALLONS	DRUMS
DESCRIPTION	QUANTITY	LINE TOTAL	
1. PETROLEUM CONTACT WATER PUMPED FROM TANKS, DRUMS OR AFVR			
2. OFF-SPEC LIGHT OIL, DIESEL OR GAS PUMPED FROM TANKS OR DRUMS			
3. SOLUBLE OILS OR COOLANTS PUMPED FROM STORAGE			
4. SEDIMENT OR SOLIDS VACUUMED FROM CONTAINMENT AREA			
5. 55-GALLON DRUM REMOVED <u>SOLID</u> OR EMPTY <u>50.1 Cuttings</u>		<u>13</u>	
6. 55-GALLON DRUM REMOVED <u>LIQUID</u> <u>Grown & water</u>	<u>6</u>	<u>6</u>	
7. <u>PPE</u>	<u>5</u>	<u>5</u>	
8. ARRIVAL TIME: <u>1030</u> DEPARTURE TIME: <u>1145</u>			

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer hazardous waste as defined by 40 CFR Part 261.

BENJAMIN BLANK ON BEHALF OF EXXONMOBIL

Generator Authorized Agent Name

Signature

Shipment Date

062708

Section III. TRANSPORTER		TRANSPORTER II	
HAZ-MAT			
TRANSPORTATION AND DISPOSAL			
P.O. BOX 37392 • CHARLOTTE, N.C. 28237			
Driver Name/Title <u>Ervin E Gaskins</u>	e. Name _____		
Phone No. <u>704-332-5600</u>	f. Address _____		
c. Truck No. <u>ST-4</u>	g. Driver Name / Title _____		
hazardous Waste Transporter Permits	h. Phone No. _____	i. Truck No. _____	
PA NCR 000003186	j. Transporter II Permit Nos. _____		
PA NCD048461370			
<u>Ervin E Gaskins</u>	<u>062708</u>		
Driver Signature	Shipment Date	Driver Signature	
		Shipment Date	

Section IV. FACILITY INFORMATION AND CERTIFICATE OF DISPOSAL			
Site Name: <u>Haz-Mat Transportation & Disposal, Inc.</u>	a. Phone No. <u>704-332-5600</u>		
Local Address: <u>210 Dalton Avenue</u>	b. Mailing Address: <u>P.O. Box 37392</u>		
<u>Charlotte, N.C. 28206</u>	<u>Charlotte, N.C. 28237</u>		
Discrepancy Indication Space			
This is to certify that all non-hazardous material removed from above location has been received and will be disposed of in accordance with applicable local, state and federal regulations in the following manner: (1) Petroleum products are blended into a beneficial reusable fuel for use in large industrial burners. (2) Waste waters are to be treated with polymers, pH adjusters, and a flocculant, then flows through a dissolved air flotation system for pretreatment separation, then into the CMUD sanitation sewer system under permit IUP#5012. (3) Sludges from treatment systems are hauled to E.P.A. approved facilities for proper disposal. Manifest and certificate of disposal are on file.			
4) Our treatment system operates on a first in, first out basis and product should be processed within seven days.			
SIGNATURE OF FACILITY AGENT <u>Mike Hinch</u>	DATE <u>06</u>	MONTH <u>27</u>	YEAR <u>08</u>